Final

Shaw™ Shaw Environmental, Inc.

Environmental Assessment Construction of the Information Technology Center

Wright-Patterson Air Force Base

Contract No. F33601-01-DW002
Delivery Order 5029

Wright-Patterson Air Force Base
88th Air Base Wing
Office of Environmental Management

Environmental Management
Wright-Patterson AFB

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September 2004

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
SEP 2004		**00-00-2004 to 00-00-2004**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Environmental Assessment Construction of an Information Technology Center Wright-Patterson Air Force Base	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Shaw Environmental & Infrastructure, Inc.,5050 Section Avenue,Cincinnati,OH,45212**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**71**	

FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment: Construction of an Information Technology Center

Currently, WPAFB lacks a single center for information technology development, integration, and transfer. Organizations that provide information technology support are located in several substandard facilities at the base. The current locations of these organizations and the use of substandard equipment reduce and prohibit the ability for efficient and comprehensive information technology development, resulting in degraded support for the warfighter. The proposed action of constructing a consolidated ITC would eliminate these issues and provide for a center that will establish internationally recognized center of information technology excellence.

Description of Proposed Action and Alternatives

The proposed action is to construct a multi-building ITC. The proposed location for the construction of the ITC is at the site of former Buildings 20125 and 20127, which have been demolished, and Building 20126, which is scheduled for demolition. This EA was prepared using the design information available to date. To meet the anticipated space requirement of 500,000 gross square feet (gsf), the proposed center would be a five-phase project consisting of the independent construction of one building per phase. Each building would be approximately 100,000 to 130,000 gsf and would include a basement and a maximum of three stories above grade. Parking lot construction would be phased to coordinate with the construction of the buildings and maintain appropriate staging areas. Seventh Street would be eliminated (EA Section 2.1).

Under the No Action alternative, the information technology functions would not be consolidated or upgraded. This alternative serves as a baseline against which the Proposed Action can be compared (EA Section 2.2).

Environmental Consequences

Both alternatives would have minimal or no environmental impacts on the following issues: groundwater, cultural resources, threatened and endangered species, wetlands, IRP sites, land use, socioeconomics, and environmental justice (EA Sections 4.4, 4.5, 4.6, 4.7, 4.10, 4.11, 4.12, and 4.15).

Soils (EA Section 4.1): Under the Proposed Action, there would be short-term, minor impacts to soil during site preparation, excavation, and construction activities, due to potential soil erosion. Impacts would be minimized by implementing erosion and siltation controls. The No Action alternative would not impact soil or result in soil erosion.

Floodplain (EA Section 4.2): The project area does not lie within the 100-year floodplain elevation of 814.3 feet above mean sea level. There would be potential minor impacts on floodplain management of the storm sewer outfall due to surface water runoff from the new paved areas. Impacts would be minimized by monitoring runoff as phases of the ITC are built. The No Action alternative would not impact the floodplain.

Air Quality (EA Section 4.3): There would be minor, short-term impacts due to particulate matter and engine exhaust emissions generated during site preparation, excavation, and construction activities. The No Action alternative would not impact air quality.

Surface Water (EA Section 4.4): There would be potential minor impacts due to surface water runoff from the new paved areas. Impacts would be minimized by monitoring runoff as phases of the ITC are built. The No Action alternative would not impact surface water.

Natural Resources (EA Section 4.6): There would be short-term minor negative impacts during site preparation/excavation activities due to loss of vegetation on construction sites. Long-term impacts would be minimized because the site would be re-vegetated and landscaped. The No Action alternative would not impact natural resources.

Noise (EA Section 4.8): There would be short-term minor impacts on ambient noise due to noise from site preparation, excavation, and construction activities. Impacts would be minimized because these activities would be carried out during normal working hours. The No Action alternative would not impact noise.

Health and Safety (EA Section 4.9): During site preparation, excavation, and construction, there would be potential impacts on the health and safety of workers. Impacts would be minimized by adherence to safety standards. The No Action alternative would not impact Health and Safety.

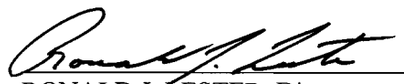
Transportation/Traffic (EA Section 4.13): During construction, there would be short-term nominal impacts due to intermittent construction traffic. There would be long-term impacts due to traffic associated with the estimated 1,800 occupants of the ITC. Impacts would be minimal because roadways and access to the site are anticipated to be adequate for the population. The No Action alternative would not impact transportation or traffic.

Utilities (EA Section 4.14): There would be potential short-term minor impacts on utilities in areas to be excavated by WPAFB. Impacts would be minimized by following the procedures specified for underground utilities (i.e., digging clearances), overhead utilities, and electrical utilities in the area. The No Action alternative would not impact utilities.

Environmental Justice (EA Section 4.15): There are no Environmental Justice issues associated with the implementation of the Proposed Action or the alternative.

Public Notice: A public notice was posted in the Dayton Daily News on 1 November 2004 for a 30-day public comment period.

Finding of No Significant Impact (FONSI): The proposed action is to construct a multi-building ITC in Area B. The ITC would consolidate and upgrade information technology development, integration, and transfer facilities. Under the No Action alternative, information technology functions would not be consolidated or upgraded. Based on my review of the facts and analysis contained in the EA, I conclude that the Proposed Action and the No Action alternative will not have a significant impact. Accordingly, the requirements of the National Environmental Policy Act, the Council on Environmental Quality Regulations and 32 CFR 989 have been fulfilled and an environmental impact statement is not required and will not be prepared.



2 Dec 04

RONALD J. LESTER, Director
Office of Environmental Management

DATE

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Submitted to:

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September 2004

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LIST OF ACRONYMS

AFI	Air Force Instruction
AFMAN	Air Force Manual
AFPD	Air Force Policy Directive
AFRIMS	Air Force Restoration Information Management System
AICUZ	Air Installation Compatible Use Zone
AMC	Acquisition Management Complex
APZ	Accident Potential Zone
bgs	below ground surface
BHPO	Base Historic Preservation Officer
BMP	Basewide Monitoring Program
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CRMP	Cultural Resources Management Plan
dB	decibel
DoD	U.S. Department of Defense
EA	environmental assessment
EFDZ	earthfill disposal zone
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
ESA	Endangered Species Act
ft	feet
FY	Fiscal Year
gsf	gross square feet
ICI	International Consultants Incorporated
IRP	Installation Restoration Program
IT	Information Technology
ITC	Information Technology Center
MOA	Memorandum of Agreement
MSL	mean sea level
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
OAC	Ohio Administrative Code

LIST OF ACRONYMS (continued)

ODNR	Ohio Department of Natural Resources
OEPA	Ohio Environmental Protection Agency
ORC	Ohio Revised Code
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PM	Particulate Matter
PSD	Prevention of Significant Deterioration
PTI	Permit to Install
SAIC	Science Applications International Corporation
SCS	Soil Conservation Service
sf	square feet
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	sulfur dioxide
USAF	U.S. Air Force
USC	United States Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic carbon
WPAFB	Wright-Patterson Air Force Base

1.0 Purpose and Need For Action

This environmental assessment (EA) presents the proposed action of constructing a multi-structural Information Technology Center (ITC) located in Area B at Wright-Patterson Air Force Base (WPAFB), Ohio. This EA has been performed in accordance with the National Environmental Policy Act (NEPA) of 1969, 40 Code of Federal Regulations (CFR), Part 1500, the Council on Environmental Quality (CEQ) regulations implementing NEPA, and the U.S. Air Force (USAF) Environmental Impact Analysis Process (EIAP) [32 CFR Part 989]. The facility is intended to create a center of excellence for information technology. Currently, WPAFB lacks a single center for information technology development, integration, and transfer. Without the consolidation of information technology functions, the Air Forces capability to develop, incorporate and deploy technology faster, cheaper and smarter is reduced. The ITC will provide state-of-the-art computing, and a collaborative modeling and simulation environment necessary to maintain and improve information technology functions, increase effectiveness, and reduce redundancy in information technology development and unnecessary operating costs.

1.1 Project Description

The proposed location for the construction of the ITC is in Area B at the site of former Buildings 20125 and 20127, which have been demolished, and Building 20126, which is scheduled for demolition. As shown in Figures 1.1-1 and 1.1-2, this site is bordered by Fifth, M (also known as Skyline Drive), and Eighth Streets, and Hobson Way (formerly known as P Street). As stated previously, WPAFB lacks a single center for information technology development, integration, and transfer. Organizations that provide information technology support are located in several substandard facilities at the base. Adequate space for classified computing capability, learning and engineering spaces, as well as a state-of-the-art modeling and simulation environment is currently substandard or unavailable. The current locations of the information technology organizations and the use of substandard equipment reduces and prohibits the ability for efficient and comprehensive information technology development, resulting in degraded support to the warfighter. The proposed action of constructing a consolidated ITC would eliminate these issues and provide for a center that will establish an internationally recognized center of information technology excellence.

The ITC would provide modern, flexible classified office space, classified computer rooms, and unclassified office space in a multi-building facility. The ITC would provide state-of-the-art computing, and a collaborative

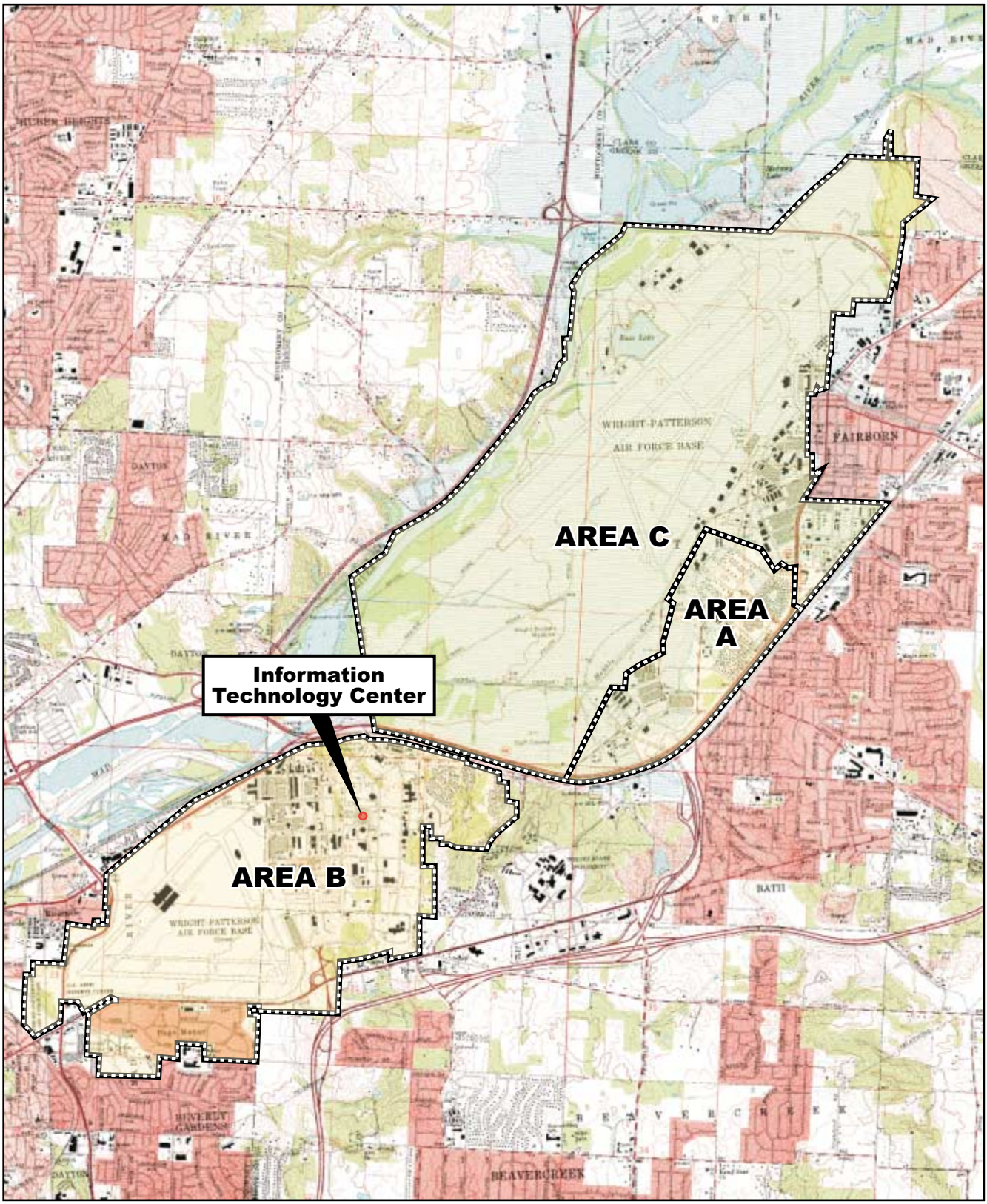

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Figure 1.1-1
Location of the Proposed
Information Technology Center
Wright-Patterson Air Force Base
Dayton, Ohio

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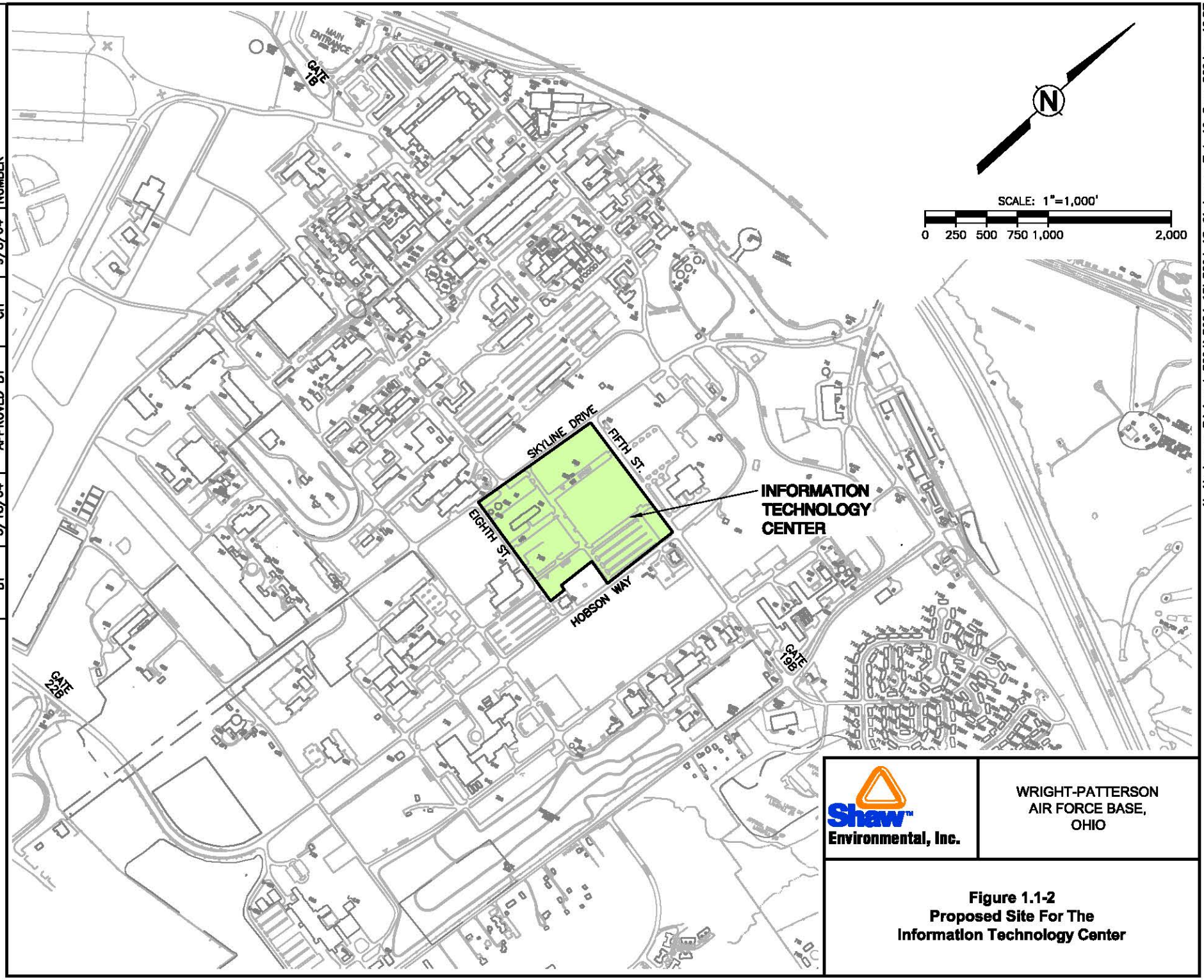

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WRIGHT-PATTERSON AIR FORCE BASE, OHIO

Figure 1.1-2
Proposed Site For The
Information Technology Center

modeling and simulation environment required for the rapid infusion of information technology to enhanced weapon system life-cycle acquisition and support capabilities.

1.2 Decision to be Made

The purpose of this EA is to analyze the proposed action and its alternative (No Action) and determine whether to implement the proposed action (i.e., construction of an Information Technology Center) so that a Finding of No Significant Impact (FONSI) can be determined. The EA will provide the decision maker and the public with information required to understand the short-term and long-term consequences of the proposed action and its alternative. Where applicable, mitigation measures will be recommended to minimize adverse impacts. The necessity for the preparation of an Environmental Impact Statement (EIS) will also be determined.

1.3 Scope of Environmental Analysis

Aspects of the proposed action with potential environmental impacts include:

- Soils
- Floodplain
- Air quality
- Water quality
- Cultural resources
- Natural resources
- Wetlands
- Noise
- Health and safety
- Socioeconomics
- Transportation/Traffic
- Utilities
- Environmental justice

These issues will be particularly emphasized as part of this environmental impact assessment analysis.

1.4 Regulatory Requirements

Statutes and regulations to which the Air Force must comply are summarized in Table 1.4-1. The regulatory requirements are listed under each appropriate category in Section 3.0.

Table 1.4-1
Summary of Applicable Regulations
for the Proposed Action and Alternative
Page 1 of 2

Natural Resources

- AFI 32-7064, Integrated Natural Resource Management Plan
- Endangered Species Act of 1973, 16 USC §1531 et seq.
  50 CFR Part 200
  50 CFR Part 402
  33 CFR Parts 320-330
- Executive Order 11990 – Protection of Wetlands
- 40 CFR, Part 6, Appendix A – Protection of Floodplains
- 40 CFR, Part 6, Appendix A – Protection of Wetlands
  40 CFR, Part 230 – Protection of Wetlands
  40 CFR, Parts 320-330 – Protection of Wetlands
- Clean Water Act, Section 404
- Ohio Revised Code (ORC) 1531.25, Protection of Species Threatened with State-Wide Extinction

Land Use

- AFI 32-7063, Air Installation Compatible Use Zone (AICUZ) Program

Cultural/Historic Resources

- AFI 32-7065, Cultural Resources Management
- National Historic Preservation Act of 1966, as amended
- 36 CFR Part 800 – Protection of Historic and Cultural Properties

Air Quality

- National Ambient Air Quality Standards (NAAQS) – 40 CFR §81.34 and §81.336
- Ohio Administration Code (OAC) 3745-17 Particulate Matter Standards
- OAC 3745-31 Permit to Install (PTI) New Source of Pollution
- OAC 3745-25 Emergency Episode Standards
- OAC 3745-15-06 *de minimis* air contaminant source exemption

Noise

- 29 CFR 1910.95 Occupational Noise Exposure

Wastewater/Stormwater

- 40 CFR Part 122.26 Storm Water Discharges
- OAC 3745-33 Ohio National Pollutant Discharge Elimination System (NPDES) Permit
- OAC 3745-38 Notice of Intent (NOI)
- City of Dayton Sewer Use Ordinance (September 21, 1994).

Table 1.4-1
Summary of Applicable Regulations
for the Proposed Action and Alternatives
Page 2 of 2

Health and Safety

- 29 CFR 1910.133 Eye and Face Protection
- 29 CFR 1910.1025 Occupational Safety and Health Standards: Lead
- 29 CFR 1910.1200 Hazard Communication
- 29 CFR 1910.34 Respiratory Protection
- 29 CFR 1910.135 Occupational Head Protection
- 29 CFR 1910.136 Occupational Foot Protection
- Subpart Z Toxic and Hazardous Substances
- Occupational Safety and Health Act (OSHA) of 1970, revised 1978
- 29 CFR 1926 Safety and Health Regulations for Construction
- 29 CFR 1926.62 Occupational Health and Environmental Controls: Lead
- Air Force Manual (AFMAN) 91-201, Explosive Safety Standards

2.0 Description of Proposed Action and Alternatives

2.1 Proposed Action: Construction of an ITC

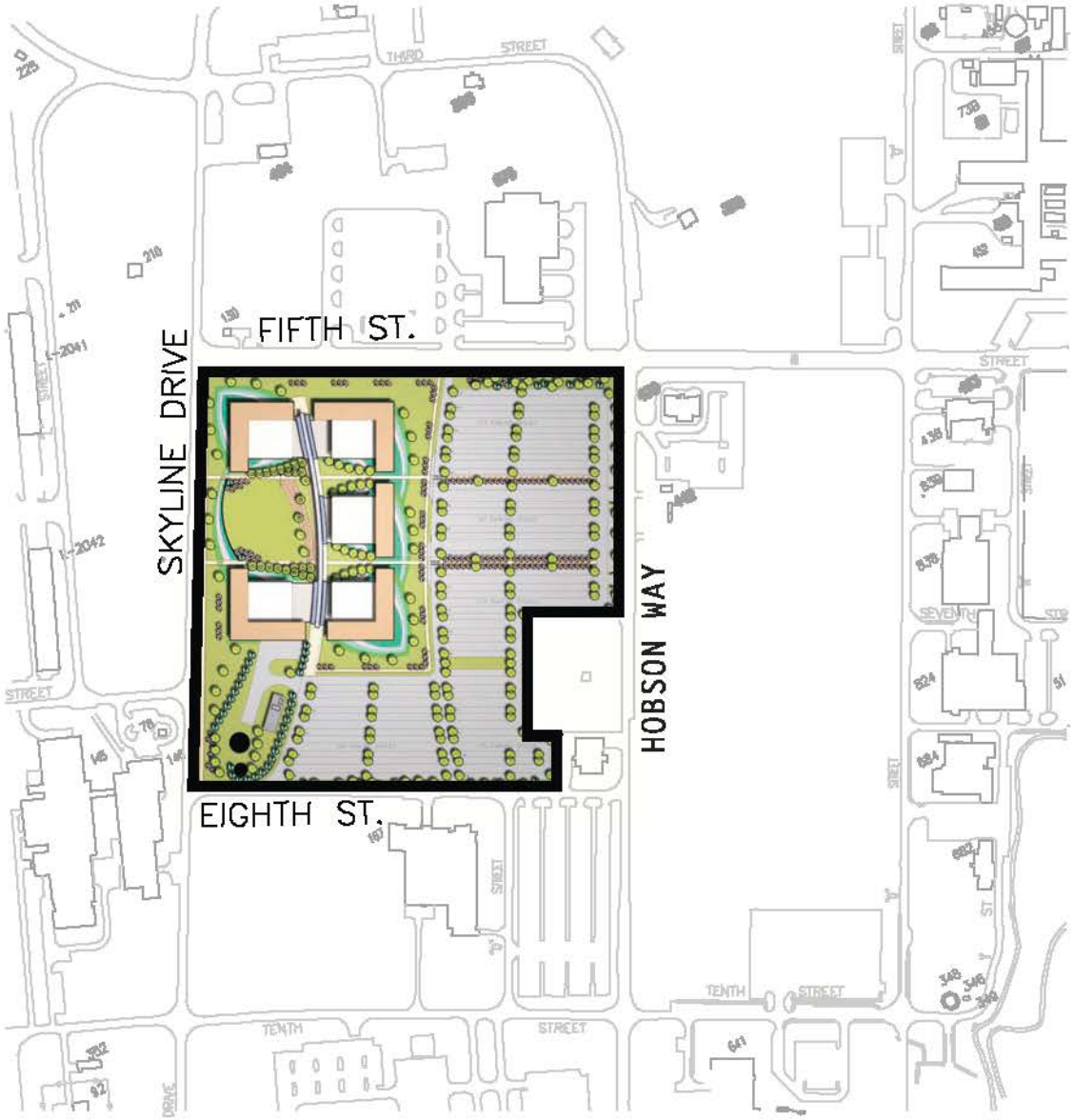
The proposed action is to construct a multi-building ITC (Figure 2.1-1). Although the final design is not complete, this EA is based on the information available to date. The proposed location for the construction of the ITC is at the site of former Buildings 20125 and 20127, which have been demolished, and Building 20126, which is scheduled for demolition as part of Phase I.

To meet the anticipated space requirement of 500,000 gross square feet (gsf) (approximately 11.5 acres), the proposed center would be a five-phase project consisting of the independent construction of one building per phase. Each building would be approximately 100,000 gsf to 130,000 gsf (2.3 to 2.4 acres) and would include a basement and a maximum of three stories above grade. Parking lot construction would be phased to coordinate with the construction of the buildings and maintain appropriate construction staging areas. The parking lot for Phase I will be designed to accommodate 80% of the building population. To accommodate the center, Seventh Street would be eliminated. A detailed description of the project is available in the *Information Technology Center 100% Design Submittal* (KZF, 2002).

Activities associated with construction would include site preparation, construction of the buildings and parking lot, and landscaping. Minimal site preparation activities (e.g., clearing and grubbing) are anticipated because the site should be clean after the demolition of Buildings 20125, 20126, and 20127 and removal of the associated parking lots. During construction, relocation of water mains and steam lines would be required, sanitary sewer lines would need to be replaced, and additional storm water system piping would be installed.

The buildings would consist of a reinforced concrete foundation and floor slab, structural frame, and roof systems. The facility would include computer rooms, secure spaces, administrative and special purpose spaces, and learning and engineering spaces. Total occupancy of the center once all phases are completed is expected to be approximately 1,800 people.

Currently, the organizations that provide information technology support are located in several substandard facilities at the base. Information technology personnel would vacate existing facilities and re-locate to the ITC. In addition to the vacancy due to re-location, the need for demolition is considered for military construction projects any time a new facility is built (USAF, 1997). An equivalent amount of square footage



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0 250 500 1,000 feet

Figure 2.1-1
Information Technology Center
Master Plan Development Plan

adapted from KZF, Inc., 2002

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on base is demolished so as not to increase the total amount of building space, or the footprint of the base. In an effort to maintain building square footage across the base at its current level, seven buildings (10274, 10281, 10297, 20126, 30089, 30209, and 301210) would be demolished (WPAFB, 2003a) during the course of the multi-year project. With the exception of Building 20126, none of these buildings are in the proposed project area or part of the operation of the proposed ITC. Impacts from the demolition would be tiered from the *Final Environmental Impact Statement for Demolition of Multiple Historic Facilities* (USAF, 1999). Nine buildings (10280, 10262, 10266, 20016, 20145, 20146, 20256, 20676, and 21606) would be retained for other uses and occupied by other organizations (WPAFB, 2003a). The lease will be turned in for one off-base facility (WPAFB, 2003a).

2.2 No Action

Under the No Action alternative, it is assumed that information technology functions would not be consolidated or upgraded. This alternative will serve as a baseline against which the Proposed Action can be compared.

2.3 Alternatives Eliminated from Further Study

Another alternative initially considered was to locate the ITC within the Acquisition Management Complex (AMC) sites V and VI. This alternative was eliminated from further evaluation because of the limited space available for development. The AMC V/VI currently provides 433,000 gsf for development while the ITC requirement is in excess of 500,000 gsf. This shortfall in available area would require expansion of the AMC V/VI. The AMC Master Plan requirements and agreements with the State Historic Preservation Office (SHPO) preclude expanding the AMC V/VI above grade because expansion would negatively impact the historic view shed in this area of the base.

Use of the AMC V/VI for the ITC would complete the AMC planned development. This "build out" of the AMC complex would limit its future potential for acquisition management expansion and would also limit the opportunity for future expansion of the ITC beyond the identified 500,000 gsf. In addition, the electrical capacity is marginal at the AMC site for the total ITC load requirements (KZF, 2002).

2.4 Comparison of Environmental Consequences Between Alternatives

The impacts associated with the proposed action and the No Action alternatives are summarized in Table 2.4-1. The information includes a concise definition of the issues addressed under each alternative and the

environmental impacts associated with each alternative. The analysis is based on information discussed in detail in Chapter 4.0, Potential Environmental Impacts.

Table 2.4-1
Comparison of Environmental Consequences of the Proposed Action and Alternative

Resources	Alternative A: Proposed Action	Alternative B: No Action
Geology and Soil	Short-Term: Potential minor impacts during site preparation, excavation, and construction activities (i.e., soil erosion). Impacts would be minimized because erosion and siltation controls would be implemented. Long-Term: No impact.	Short-Term: No impact. Long-Term: No impact.
Floodplain Issues	Short-Term: Potential minor impacts due to surface water run off from new paved areas. Impacts would be minimized by monitoring run off as phases of the ITC are built. Long-Term: Potential minor impacts on floodplain management due to surface water runoff from new paved areas. Impacts would be minimized by monitoring runoff as phases of the ITC are built.	Short-Term: No impact. Long-Term: No impact.
Air Quality	Short-Term: Minor, short-term impact from particulate matter and engine exhaust emissions generated during site preparation, excavation, and construction activities. Long-Term: No impact.	Short-Term: No impact. Long-Term: No impact.
Water Resources		
Groundwater	Short-Term: No impact. Long-Term: No impact.	Short-Term: No impact. Long-Term: No impact.
Surface Water	Short-Term: Potential minor impacts during site preparation, excavation, and construction activities. Impacts would be minimized because erosion and siltation controls would be implemented. Long-Term: Minor impacts due to increase in paved area would generate additional storm water flow. Impacts would be minimized by monitoring flow as phases of ITC are built.	Short-Term: No impact. Long-Term: No impact.
Cultural/Historic Resources	Short-Term: No impacts would occur because archeological sites (i.e., WPAFB Mound) would be identified in the field and vehicle traffic would be minimized. Long-Term: No impact.	Short-Term: No impact. Long-Term: No impact.

Table 2.4-1
Comparison of Environmental Consequences of the Proposed Action and Alternative

Resources	Alternative A: Proposed Action	Alternative B: No Action
Natural Resources		
Vegetation	Short-Term: Minor, negative impacts during site preparation/excavation activities due to loss of vegetation on construction site. Long-Term: Nominal impact from loss of vegetation on construction site; vegetation is common throughout base and site would be re-vegetated and landscaped.	Short-Term: No impact. Long-Term: No impact.
Threatened and Endangered Species	Short-Term: No impact. Long-Term: No impact.	Short-Term: No impact. Long-Term: No impact.
Wetlands	Short-Term: No impact. Long-Term: No impact.	Short-Term: No impact. Long-Term: No impact.
Noise	Short-Term: Minor impacts on ambient noise from site preparation, excavation, and construction activities. Impacts would be minor because these activities would be carried out during normal working hours. Long-Term: Minor increase in noise due to additional 1,800 people working in the area.	Short-Term: No impact. Long-Term: No impact.
Health and Safety	Short-Term: Potential impacts to workers during construction activities. Impacts would be minimized by adherence to safety standards. Long-Term: No impact.	Short-Term: No impact. Long-Term: No impact.
IRP Sites	Short-Term: No impact. Long-Term: No impact.	Short-Term: No impact. Long-Term: No impact.
Land Use	Short-Term: No impact. Long-Term: Land use in the entire site would be classified as Research and Development.	Short-Term: No impact. Long-Term: No impact.
Socioeconomics	Short-Term: Nominal, beneficial impact on local economy from revenue generated by action.	Short-Term: No impact.

Table 2.4-1
Comparison of Environmental Consequences of the Proposed Action and Alternative

Resources	Alternative A: Proposed Action	Alternative B: No Action
	Long-Term: Beneficial impact to the base from reduced costs associated with redundancy of information technology development and unnecessary operating costs.	Long-Term: Negative impacts associated with redundancy of information technology development and unnecessary operating costs.
Transportation/Traffic	Short-Term: Nominal, intermittent impacts from construction traffic. Long-Term: Minor, negative impacts due to increase in traffic from occupancy of 1,800 people. Impacts would be minimal because roadways and access to the site are anticipated to be adequate for the population.	Short-Term: No impact. Long-Term: No impact.
Environmental Justice	Short-Term: No impact. Long-Term: No impact.	Short-Term: No impact. Long-Term: No impact.

3.0 Affected Environment

Section 3.0 identifies existing environmental conditions at the subject site and the no action alternative could have an effect.

3.1 Soils

According to the U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS) soil survey of Greene County, Ohio (USDA-SCS, 1978), the study area soils [0 to 5 feet (ft) below the ground surface] are composed primarily of silt to clay loam belonging to the Miamian Series of soils. Miamian soils consist of nearly level to steeply sloped soils that formed in glacial till. The surface soils consists of brown silty loam from 0 to 7 inches deep, yellowish brown clay and clay loam from 7 to 24 inches deep, and brown loam from 24 to 32 inches deep. The substratum is yellowish brown loam and is encountered at depths of 32 to 60 inches. These soils exhibit moderately low permeability and are well-drained.

The dominant soil types surrounding the proposed ITC site in Area B are Miamian-Urban land complex, rolling (MrC) and undulating (MrB). Soil types MrC and MrB have from 40 to 70 percent of the land surface covered with pavement and earthfill, and the remaining areas are undisturbed Miamian soils. The thickness of the soil overlying the bedrock is expected to be approximately ten feet or less and would be verified during the exploratory borings prior to construction.

3.2 Floodplain Issues

WPAFB is located within the Mad River valley of the Great Miami River Basin. The Mad River 100-year flood plain elevation of 814.3 feet above mean sea level (MSL) was determined by a U.S. Army Corps of Engineers study in 1995 (ICI/SAIC, 1995). The proposed ITC site is at an elevation range between 935 ft and 950 ft, MSL, which is above the Mad River 100-year flood plain elevation.

3.3 Air Quality

According to the Clean Air Act (CAA), National Ambient Air Quality Standards (NAAQS) are to be set by the United States Environmental Protection Agency (USEPA). The NAAQS are designed to limit pollution in the air anywhere in the United States in order to protect human health and public welfare. The NAAQS have been established for six criteria pollutants, which include sulfur dioxide (SO_2), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), ozone (O_3), and lead. Sections 107 and 110 of the CAA give

the responsibility to each state of developing a set of regulations that implement the NAAQS, called State Implementation Plans (SIPs).

The Ohio Environmental Protection Agency (OEPA) is responsible for developing the SIP and implementing and enforcing the environmental regulatory requirements outlined by USEPA, including monitoring for criteria pollutants to determine if the levels meet the criteria pollutant attainment standards. Currently, the areas listed above, including WPAFB, are in attainment for all criteria pollutants, except ozone. WPAFB is located in the Dayton/Springfield area for ozone NAAQS, which covers Clark, Greene, Miami and Montgomery counties. On April 15 2004, USEPA designated the Dayton/Springfield area as "basic non-attainment" for the 8-hour ozone NAAQS. This designation was published in the 30 April 2004 *Federal Register* notice [69 FR 23858]. USEPA also published the *Final Rule to Implement the 8-hour Ozone National Ambient Air Quality Standard – Phase 1* on 30 April 2004 [69 FR 23951]. The publication of the attainment and non-attainment area designations has triggered the clock for OEPA to develop a revision to their SIP.

Section 176(c) of the CAA requires that before a Federal entity takes an action, it must make a determination that the proposed action will not interfere with the SIP or the State's ability to attain and maintain the NAAQS. In 1995, Congress limited the application of section 176(c) to non-attainment and maintenance areas only.

USEPA established *de minimis* emissions levels and exempted certain actions. USEPA also allowed Federal entities to develop their own list of actions which are presumed to conform. For non-exempt actions that increase emissions above the *de minimis* levels, the Federal agency must demonstrate that the action will conform with the SIP or will not cause or contribute to any new violation of any standard in any area; interfere with provisions in the applicable SIP for maintenance of any standard; increase the frequency or severity of any existing violation of any standard; or delay timely attainment of any standard or any required interim emissions reductions or other milestone.

USEPA is currently reviewing the general conformity program and may revise the regulations, as appropriate with respect to the 8-hour standard. USEPA is proposing to retain the existing *de minimis* emission levels for volatile organic carbon (VOC) and NOx (both ozone precursors). The existing *de minimis* emission levels do not include the "Basic" non-attainment category. The *de minimis* emission levels for "Moderate" non-attainment area are 50 tons per year for VOCs and 100 tons per year for NOx. The *de minimis* emission levels

for "Other" non-attainment area are 100 tons per year for VOCs and 100 tons per year for NOx. It has been assumed that the "Basic" category thresholds will be no more restrictive than the "Moderate" category threshold and thus, "Moderate" category threshold has been used in this assessment.

WPAFB is considered a major source of air pollutants, and submitted an application for a Clean Air Act Title V – Air Quality Operating permit in February 1996. OEPA issued a final permit on 27 January 2004 with an effective date of 17 February 2004, identifying all sources of air pollution, applicable regulatory requirements, and emission limits.

An air permit would not be required for the construction and operation of the ITC as it meets the "*de minimis*" air contaminant source exemption. The exemption is addressed under OAC 3745-15-06.

3.4 Water Resources

Groundwater at the proposed ITC site in Area B occurs under two circumstances: water table conditions and in bedrock, at depths ranging from approximately 9 to 15 feet below ground surface (bgs) (IT, 1997a). The water-bearing zone in this region of Area B is part of the "Hill" aquifer as defined in the *Groundwater Flow Modeling Technical Memorandum* (IT, 1997b) and is of low hydraulic conductivity. The Hill aquifer in Area B is not directly used as a drinking water supply and is not a major source of recharge to the Buried Valley Aquifer system which is designated as a sole source aquifer.

The groundwater flow pattern through this region is created by a bedrock ridge that trends northwest from the southeast corner of Area B to Huffman Dam. Figure 3.4-1 presents the groundwater flow pattern and regional bedrock topography (Dumouchelle et al, 1993).

The surface water features within Area B are man-made ditches and ponds, and concrete-lined channels. Storm drainage exits Area B by several paths through a combination of surface drainage and storm drains. The only surface water features at the proposed ITC site are shallow, unlined drainage ditches along the roadways. Storm water generated at the site is captured by these shallow drainages and catch basins, and then ultimately routed through underground storm sewer lines to Outfall No. 3 at the Mad River (Figure 3.4-2). A small portion of the east parking lot drains into Outfall Area No. 5, which is on the east side of the topographic divide of this region of Area B, and ultimately drains into Hebble Creek in Area C. The selected construction contractor will be responsible for installing a new underground storm water network. Surface water sheet flow

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		APPROVED BY	TC 9/8/04	

WATER WELLS

HUFFMAN DAM

WATER WELLS

INFORMATION TECHNOLOGY CENTER

WELL-1
WELL-2B
WELL-2A
WELL-4
WELL-3
WELL D
WELL E
WELL B
WELL C
WELL A
WELL F
WELL MFW (MARKSMAN WELL)
WELL 4
WELL 8
WELL 9
WELL 7
WELL 3
WELL 2
WELL 1

700

STATE ROUTE 4
TWIN LAKES
HOBART CREEK
MAD RIVER
MUD RUN
USGS WELL BOUNDARY

LEGEND:

- BASE BOUNDARY
- TOP OF BEDROCK ELEVATION CONTOUR (ft, msl) (APPROXIMATE BOUNDARY OF BURIED VALLEY AQUIFER)
- WPAFB DRINKING WATER WELL LOCATIONS
- WATER PRODUCTION WELL
- GROUNDWATER FLOW DIRECTION

N

0 1000 2000 3000 4000 8000 FEET

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Figure 3.4-1
BOUNDARY OF THE BURIED VALLEY AQUIFER

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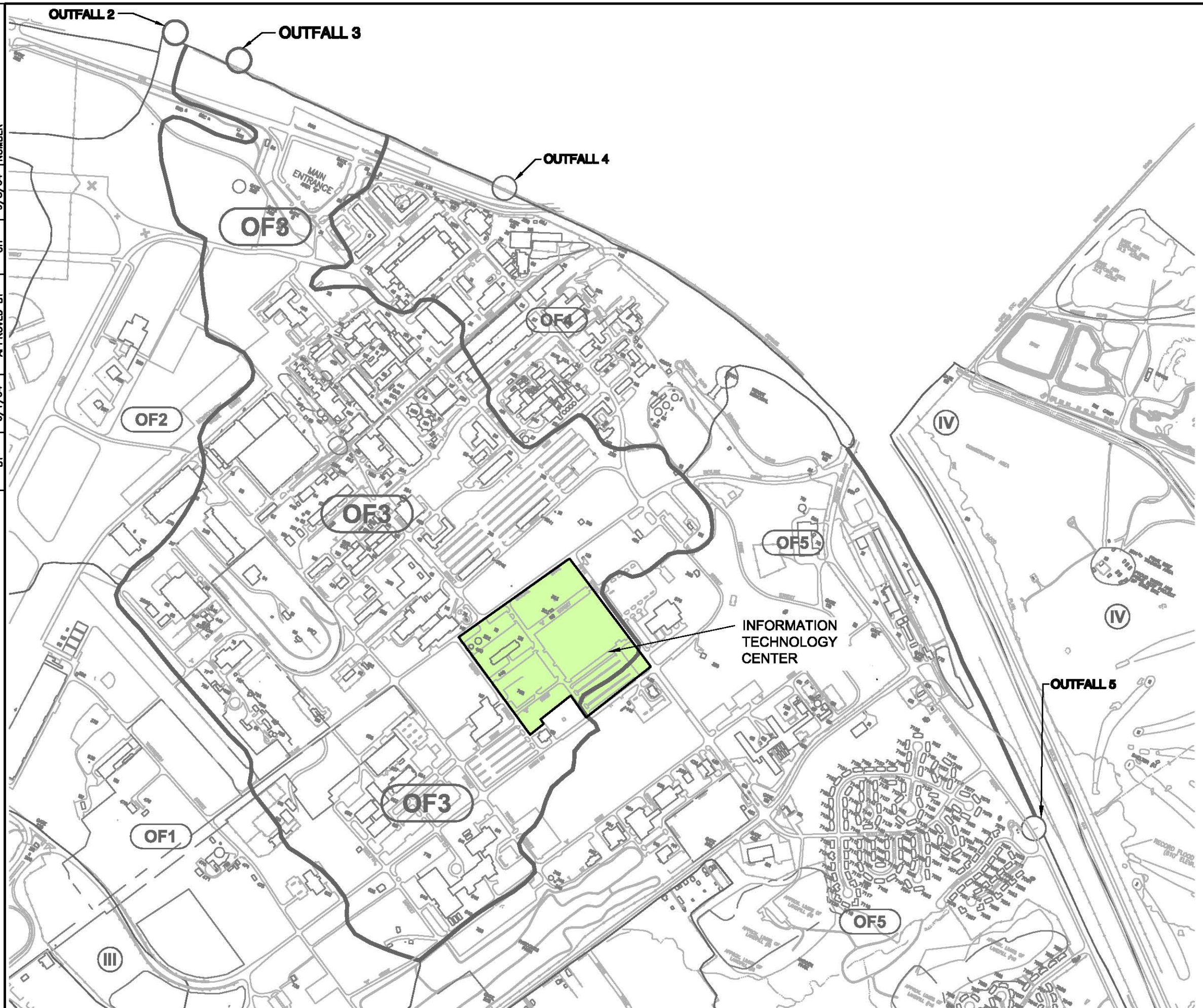

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Figure 3.4-2
Storm Sewer Network Outfall Area 3

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will be toward the west (down slope) into storm water collectors. It is assumed that drainage from the proposed ITC site will follow the same drainage path.

Permits issued by OEPA may be required to cover actions that could potentially affect sewer systems at the base. For example, significant changes or additions to the sanitary sewer systems or installation/ relocation of water mains as a result of building construction may require a "Permit to Install." Furthermore, permits may be required for discharges into storm sewers and/or for erosion control. Storm water runoff from construction activities can impact water quality by contributing sediment and other pollutants exposed at construction sites. The NPDES Storm Water Program requires operators of both large and small construction sites to obtain authorization to discharge construction storm water under a general permit. Under the Phase II rule, a permit would be required for a construction site involving greater than one acre of land. A Notice of Intent (NOI) would serve as the application of the general permit. As part of the NOI, the storm water management plan would include the erosion control measures that would be taken. Regular monitoring would be required to ensure that these measures are implemented and effective in erosion control. Because each phase of construction would disturb more than one acre, an NOI would be filed for each phase.

At the time this EA was prepared, the design for each building in the ITC was not yet final. Depending upon the configuration of each building (one to three stories), the square footage of each building is estimated to range from 100,000 square feet (sf) to 130,000 sf (2.3 to 2.4 acres). The total area of the construction site for the ITC (i.e., buildings plus associated parking lots and landscaped areas) is approximately 1.2 million sf (27 acres).

3.5 Cultural Resources

A portion of the proposed construction site lies within the Army Air Forces Historic District which consists of facilities constructed in support of World War II mobilization (1941-1945), including former Building 20125. This historic district is eligible for nomination to the National Register of Historic Places. The demolition of Building 125 was evaluated in the *Final Environmental Impact Statement for the Demolition of Multiple Historic Facilities at Wright-Patterson Air Force Base, Ohio* (USAF, 1997). A Memorandum of Agreement (MOA) for the demolition of the historic facilities was signed by the SHPO in May 1999. The MOA presents mitigation measures for the Air Force to implement (USAF, 1999).

There are no archaeological sites, historic structures, or other significant cultural resources located within the immediate project area. Furthermore, much of the proposed site has been disturbed due to the presence of former Buildings 20125 and 20127 and by existing structures such as Building 20126 and two water towers. According to the *Cultural Resources Management Plan* (CRMP) (WPAFB, 1999), the closest identified archaeological resources are a historical archaeological site identified in the area to the southwest (R7 T2 S12 #7) and two prehistoric archaeological sites identified in the area to the south (33 GR 798) and southeast (33 GR 31). Site R7 T2 S12 #7 is classified as "Residential" and is considered potentially ineligible for the National Register of Historic Places (NRHP) (WPAFB, 1999). Site 33 GR 798 is classified as a "Camp" and was determined to be ineligible for the NRHP by WPAFB and SHPO in 2003. Site 33 GR 31 is a single burial mound site (referred to as the WPAFB Mound) and is listed on the NRHP. This site is believed to have belonged to the Adena culture (WPAFB, 1999).

3.6 Natural Resources

The proposed site for the construction of the ITC consists of areas designated by the base as enhanced "improved maintained" grounds (e.g., lawns and landscaped areas). Vegetation in this area consists primarily of grasses, with few weeds (see Appendix A, Site Photographs). Dominant species include tall fescue (*Festuca arundinacea*), Kentucky bluegrass (*Poa pratensis*), dandelion (*Taraxacum officinale*), and clover (*Trifolium pratense* and *T. repens*) (WPAFB, 2001). Ornamental, hardwood, and evergreen tree species are also scattered throughout the site, such as dogwoods (*Cornus* spp.), oaks (*Quercus* spp.), firs (*Abies* spp.), and maples (*Acer* spp.).

According to the Site-wide Characterization Report (ICI/SAIC, 1995), resident mammals commonly found in disturbed areas, such as the proposed location of the ITC, include eastern cottontail rabbit (*Sylvilagus floridanus*), chipmunk (*Tamias striatus*), opossum (*Didelphis virginiana*), and gray squirrel (*Sciurus carolinensis*). Birds, such as pigeon (*Columba leucocephala*), killdeer (*Charadrius vociferous*), English sparrow (*Passer domesticus*), mockingbird (*Mimus polyglottos*), and red-winged blackbird (*Agelaius phoeniceus*) are also often observed in this area type.

Compliance with Air Force Policy Directive (AFPD) 32-70 and AFI 32-7064 requires all Air Force properties to protect species classified as endangered or threatened under the Endangered Species Act of 1973 (ESA) and to comply with ORC 1531.25 and its implementing regulations for species listed by the state as threatened and endangered. To comply with these requirements, WPAFB developed an Endangered Species Management

Plan (BHE, 2001). Federal- and state-listed species at WPAFB include the Indiana bat (*Myotis sodalis*), bald eagle (*Haliaeetus leucocephalus*), eastern massasauga rattlesnake (*Sistrurus c. catenatus*), clubshell (*Pleurobema clava*, a mussel), and blazing star stem borer (*Papaipema beeriana*, a moth).

The Indiana bat habitat follows the lower reaches of Hebble Creek, Trout Creek, and the riparian corridor of Mad River from its northern reach in Area A to its confluence with Hebble Creek (ICI/SAIC, 1995; BHE/IT, 1999) where this species roosts during the summer and forages in the floodplain/riparian forests. In July 2000, two Indiana bats (a juvenile female and an adult post-lactating female) were captured along Trout Creek during a base-wide mist net survey (BHE, 2001). Radio tracking of these two bats confirmed the presence of a maternity colony in a dead slippery elm (*Ulmus rubra*) in a woodlot on the campus of Wright State University. No sightings of Indiana bats have been reported within the location of the proposed site of the ITC.

The bald eagle is a federal-listed threatened and a state-listed endangered species found throughout much of the contiguous 48 states along waterways and impoundments. Although bald eagles may be found year round in Ohio, they only occur on WPAFB as rare winter visitors with most previous sightings having been along the Mad River corridor, which contains potentially suitable winter foraging and roosting habitat (WPAFB, 2001). No sightings of the bald eagle have been reported within the project area.

The eastern massasauga rattlesnake is a federal candidate species usually found in wet areas including wet prairies, marshes, and low lying areas. Neither the historic nor current population size and status of massasaugas at WPAFB have been determined. Reports of massasauga sightings have been limited to the Prime BEEF Training Area and Twin Base Golf Course, which are not in the vicinity of the proposed action. Because the massasauga rattlesnake is a federal candidate species, there is no requirement to survey construction areas for potential snake habitat. No sightings of the massasauga rattlesnake have been reported within the project area or any part of Area B of the base.

The clubshell is a federal- and state-listed endangered species occurring in 12 streams in Kentucky, Pennsylvania, Indiana, Ohio, Michigan, and West Virginia. During recent surveys by 3D/International, Inc. (1998) and BHE Environmental (1999a), subfossil remains of the clubshell were documented at the confluence of Trout Creek and the Mad River and near the confluence of Mud Run and the Mad River (WPAFB, 2001). No sightings of the clubshell have been reported within the project area.

The blazing star stem borer is a state-listed endangered species occurring only in disjunct populations throughout the Midwestern United States. It is highly dependent upon remnants of mesic tall grass prairies. In 1992, three stem borers were captured at WPAFB's Huffman Prairie. Huffman Prairie is one of three locations where this species has been found in Ohio (WPAFB, 2001). No sightings of the blazing star stem borer have been reported within the project area.

The upland sandpiper is a state-listed threatened species normally found in upland habitat. It has been found nesting near the base Aero Club in Area C (ICI/SAIC, 1995). No sightings of the upland sandpiper have been reported within the project area.

Copies of correspondence with the Ohio Department of Natural Resources (ODNR) and the U.S. Fish & Wildlife Service (USFWS) regarding the potential occurrences of threatened and endangered species in the project areas are provided in Appendices B and C, respectively. As indicated by ODNR, there are no records of rare or endangered species within one-half mile of the project area (Appendix B). The USFWS confirmed that the project area lies within the range of the federal-listed endangered Indiana bat, eastern massasauga, and the clubshell. It is noted that the project is not likely to affect the eastern massasauga due to the project type and location of the site (Appendix C). The USFWS states that best-management practices should be used to minimized erosion from the site to reduce potential impacts to the clubshell, which has historically inhabited the Little Miami River. In addition, the USFWS states that the maternity colony of Indian bats found on the campus of Wright State University is approximately one mile from the proposed project site. Guidelines for ensuring that no adverse affects occur are provided in Appendix C and include that trees and associated habitats meeting species requirements be saved whenever possible.

3.7 Wetlands

A wetland delineation was conducted on WPAFB in 1999 (BHE, 1999b). A total of approximately 23 acres of wetlands were identified and delineated in Areas B and C. Area B contains 1.1 acres of forested/open water wetlands, 0.94 acres of scrub/shrub wetlands, and 0.9 acres of emergent wetlands. No wetlands are located in the vicinity of the proposed construction site for the ITC. The nearest wetland is approximately 1,000 ft south of the site (WPAFB, 2001).

3.8 Noise

To address both noise and safety, the Department of Defense (DoD) required military departments to establish an Air Installation Compatible Use Zone (AICUZ) program. The goal of AICUZ is to promote compatible land use on and off base to minimize noise complaints and safety hazards. According to the AICUZ study, the proposed construction site of the ITC is located in the current mission noise contour of <65 decibel (dB) (WPAFB, 1995). Under a maximum mission noise scenario, the proposed site is located in the 70 to 75 dB contour. Typical noise sources in and around the area include human activities and aircraft.

3.9 Health and Safety

The major categories of health and safety issues associated with the construction of the ITC include worker safety during construction activities and plane flight paths within the base. Worker safety concerns during construction activities would primarily include hazards associated with physical hazards (e.g., heavy equipment and vehicles, power tools), underground utilities, and potential hazardous materials (e.g., fuels).

The Air Force AICUZ program is intended to reduce the potential for aircraft mishaps in populated areas. As a result of this program, WPAFB has altered basic flight patterns to avoid heavily populated areas. In addition, airfield safety zones were established under AICUZ to minimize the number of people who would be injured or killed if an aircraft crashed. Three safety zones are designated at the end of all active runways: Clear Zone, Accident Potential Zone (APZ) I, and APZ II. The Clear Zone represents the most hazardous area. Although administrative uses (industrial, business services, manufacturing) are permitted in the APZs, "people-intensive" uses (e.g., auditoriums, classrooms) are discouraged in these areas. According to AFI 32-7063, all new construction is required to comply with the AICUZ. The proposed site of the ITC is located outside of all APZs.

With respect to building security, buildings would be located per DoD Force Protection Standards at a minimum of 25 meters from roads or Privately-Owned Vehicle Parking. Gates may be installed at the service drives to control vehicular approach to the buildings inside the 25 meter zone (KZF, 2002).

3.10 Installation Restoration Program (IRP)

The DoD developed the IRP to identify, assess, and control potential environmental contamination that may have resulted from past operations and waste disposal practices. The IRP, an element of the Defense Environmental Restoration Program, is a part of the environmental program at each DoD installation. WPAFB

currently has identified 68 IRP sites per the Air Force Restoration Information Management System (AFRIMS). WPAFB has grouped all confirmed or suspected sites requiring investigation and characterization in 11 geographically-based Operable Units (OUs), designated OUs 1 through 11 (IT, 1999). In addition to the 11 OUs, WPAFB addressed basewide issues of groundwater and surface water contamination under the Basewide Monitoring Program (BMP) (IT, 1995).

The eastern portion of the proposed site of the ITC lies within the boundary of OU9. OU9 is a collection of 11 discrete IRP sites, nine of which have been used for disposal of earthfill materials (earthfill disposal zones [EFDZs] 2, 3, 4, 5, 6, 7, 8, 9, and 10), one burial site (BS3), and one heating plant (HP5). An environmental investigation of OU9 was completed in 1997, the results of which are documented in the Final Remedial Investigation Report, Operable Unit 9 (IT, 1997a). The proposed site for the ITC does not lie within any of these IRP sites. The nearest IRP site (EFDZ 8) is located approximately 600 ft south of the proposed construction site.

3.11 Land Use

WPAFB is divided into three areas: A, B, and C. Area A contains primarily administrative activities; Area B focuses on acquisition, education, research, and development; and Area C is dominated by airfield operation, maintenance, and civil engineering activities. The base encompasses 8,145 acres and is classified as non-industrial with mixed development. Ten major land use categories have been identified on WPAFB (BHE/IT, 1999).

The proposed construction site is located in a part of Area B referred to as Wright Field Hilltop (the property primarily occupies the hilltop portion of Area B). Much of this land was acquired during World War II for wartime space requirements. Currently, the proposed construction site of the ITC consists of land designated as Community-Service. The areas adjacent to the site are primarily classified as Administrative, Open Space, and Outdoor Recreation (Woolpert, 2001).

As stated in Section 3.9, the proposed location of the ITC is outside all the APZs.

3.12 Socioeconomics

Employment in the four-county area is concentrated in the services, manufacturing, retail, and government sectors. WPAFB, with 20,364 employees in 2001, provides a major source of employment in the four-county area (WPAFB, 2003b).

It is estimated that 22,085 secondary jobs have been created in private industry in the four-county region surrounding WPAFB. WPAFB awards numerous contracts every year to local businesses. In Fiscal Year (FY) 2001, for example, contract activity in the economic impact region exceeded $742 million (WPAFB, 2003b).

3.13 Transportation/Traffic

The proposed site of the ITC is in Area B and is bordered by M (also known as Skyline Drive), Fifth, and Eighth Streets, and Hobson Way (Figure 1.1-2). N and Seventh Streets are located within the proposed site. Most traffic enters Area B through Gates 1B or 22B (KZF, 2002). Traffic would approach the proposed site from Skyline Drive and Fifth Street. Gate 19B on Fifth Street is open at select times of the day and traffic may also access the proposed site from this gate.

There has not been a recent traffic analysis of the project area (KZF, 2002). Recent traffic data for the area around the proposed construction site is only available for Gate 19B. Based on data collected on weekdays from 31 January 2003 to 6 February 2003, the peak morning hour traffic counts (0715 hours) ranged from 959 to 1065 vehicles (WPAFB, 2004a). The total number of vehicles entering the gate per day ranged from 2,127 to 2,441 (WPAFB, 2004a).

3.14 Utilities

Relocation of the 6-inch east-west and north-south water mains outside of the ITC Phase 1 footprint would be required. The new water main locations would maintain a loop around the site but would require trenching for installation. The existing 10-inch sanitary sewer pipe is in need of repair and it is expected that approximately 2,000 linear feet of this pipe would need to be replaced during construction of the ITC facility. Steam is available at the site for heating, however, the existing 12-inch and 8-inch high pressure steam lines would have to be relocated for construction of Phase 2 of the ITC. Additional information regarding utility requirements for the center, including a proposed utility plan, can be found in the *Information Technology Center 100% Design Submittal* (KZF, 2002).

3.15 Environmental Justice

The purpose of Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, is to identify, address, and avoid disproportionately high and adverse human health or environmental effects on minority and low-income populations. The area of the proposed action is located in Area B; there are no residences in this area. There would also be little change in facility operations following completion of the project.

4.0 Potential Environmental Impacts

4.1 Soils

4.1.1 Proposed Action

The land for the new ITC facility was previously used for an administration building and parking lots. Preparing the site prior to construction would require minimal leveling. The basements for each of the five buildings of the ITC facility are expected to be completed into the thin soil layer overlying bedrock (approximately 10 feet). If it is determined through the exploratory soil borings that basements must be completed into the bedrock, blasting would not be allowed. New utility lines, including the relocating of existing steam, water and sewer, are not expected to be as deep into the soil as the basements. The excavations for the basements and utility lines would not be expected to impact subsurface soils unless a leak from the construction equipment would occur.

Due to the shallow slope of the hillside where the ITC facility would be constructed, there would be a continuous potential for erosion. Therefore, until vegetative cover could be reestablished, erosion control measures in accordance with base specifications for construction projects would be implemented. Soil erosion and siltation control measures would include the use of silt fencing, straw bales, and/or hydro-mulching in and adjacent to construction areas. As part of the NOI, an erosion control plan would be submitted for each phase of the project.

In accordance with OSHA requirements, any open trenches where workers may be entering would need to be shored for side support to prevent collapse. Base contractors for the proposed ITC would also be responsible for complying with standard operating procedures and applicable health and safety regulations (Table 1.4-1).

4.1.2 No Action

Soils would not be impacted under the No Action Alternative.

4.2 Floodplain Issues

4.2.1 Proposed Action

The elevation of the proposed construction site within Area B (935 to 950 ft, MSL) is well above the Mad River 100-year flood plain elevation (814.3 ft, MSL) and reduction of floodplain management capacity would not be impacted by construction of the ITC. Construction of the new ITC at the proposed site would create approximately 500,000 sq. ft. of parking lot and street area. Parking lots and streets currently in place at this

site and those that have recently been removed have a total area of approximately 373,200 sq. ft. However, the additional storm water runoff from the paved areas of the new complex would not be expected to impact floodplain management at the storm sewer outfall location in the Mad River. Therefore, potential short-term or long-term impacts of the new ITC facility on floodplain management would be minor. Impacts would be minimized by monitoring runoff as phases of the ITC are built.

4.2.2 No Action

Floodplain management would not be impacted under the No Action Alternative.

4.3 Air Quality

4.3.1 Proposed Action

In the short-term, there would be minor, negative impacts to air quality. Impacts from construction activity associated with the ITC include the generation of fugitive dust and particulates from the removal and grading of soil, excavation operations and other associated construction activities. The estimated area for the overall project is 1,186,836 sf (27.2 acres) and the project will be completed in five phases. It was assumed that each of the five phases will cover one-fifth of the project area and one phase will be completed each year. Based on a worst-case scenario, however, particulate emissions of 3.92 tons per year (tpy) were estimated for disturbance of 237,367 sf (5.4 acres) over an assumed three-month period for each phase. This amount is approximately 29 percent of the estimated normal baseline (13.64 tpy) at WPAFB (WPAFB, 2003c). Emissions calculations and assumptions for the calculations are provided in Appendix D.

The VOC and/or NOx emissions (if any) from fuel combustion in construction equipment would be expected to be negligible and do not warrant a detailed emissions estimation. The VOC and NOx emissions would be below the *de minimis* emission levels area of 50 tons per year for VOCs and 100 tons per year for NOx, and thus, in accordance with 40 CFR 93.153(c)(1), a conformity determination is not required.

In addition, there would be minor, short-term emissions from vehicles that would travel in the construction area. During construction, dust suppression measures would be used to minimize fugitive dust emissions.

4.3.2 No Action

No impacts to air quality would occur under the No Action alternative.

4.4 Water Resources

4.4.1 Proposed Action

The new ITC building would potentially have subsurface basements in each of the five buildings. Groundwater quality in the Hill aquifer occurring at 9 to 15 ft, bgs would not be expected to be impacted significantly by the basements. Turbidity may increase but would not be expected to continue after construction is completed. The five proposed buildings have approximately the same amount of impervious area that existed with the previous buildings and parking lots and would not be expected to reduce the current rate of infiltration. No other potential groundwater impacts have been determined. Therefore, construction of the ITC at the proposed location (Figure 1.1-2) is not expected to significantly impact groundwater resources.

Small spills that do not impact the environment and are cleaned up by the contractor must be documented and reported to the Office of Environmental Management. This documentation is used to record the nature of the spill, and to help determine trends and ways to prevent future spills. If a larger spill occurs that cannot be easily contained and cleaned up by the contractor, they must call 911 immediately. The spill response team, including representatives from EM and Bioenvironmental Engineering would then be notified by the Command Post. This team has extensive experience at containing and cleaning up spills to minimize the potential for contamination of base waterways.

New storm water system piping would be installed to support the ITC construction. However, the five proposed buildings have approximately the same amount of impervious area that existed with the previous buildings and would not be expected to generate any additional storm water load. The new parking lot and driveway area, however, will be larger than the current existing and recently removed areas. This approximately 126,800 sq. ft. increase in paved area (from approximately 373,200 sq. ft. to approximately 500,000 sq. ft.) will generate additional storm water flow to the Mad River. The increase in flow should be monitored and as phases of the ITC facility are built, the storm sewer system would need to be evaluated as new parking surface is added with each phase.

During construction the soil throughout the site would be disturbed and exposed to erosion. Therefore, until vegetative cover can be reestablished, erosion control measures would be implemented in accordance with base specifications for construction projects and the Storm Water Management Plan. Soil erosion and siltation control measures would include the use of silt fencing, straw bales, and/or hydro-mulching in and adjacent to

construction areas.

WPAFB storm water drainage to the Mad River is monitored under provisions of the NPDES. A NPDES permit places limits on the levels of certain pollutants that may be discharged into water bodies. Pollutants regulated at individual outfalls include benzene, toluene, ethylbenzene, and xylenes (BTEX), suspended solids, metals, oil and grease, and pH. As discussed in Section 3.4, a permit for discharge associated with construction disturbance of greater than one acre of land would be required under Phase II of the storm water regulations. The approximate area to be disturbed during each phase of the construction of the ITC is expected to be approximately 2.3 to 2.4 acres. Therefore, a NPDES construction permit from the OEPA would be required.

4.4.2 No Action

Under the No Action Alternative, impacts to water resources would not be expected.

4.5 Cultural Resources

4.5.1 Proposed Action

A portion of the proposed site was the location of former Building 20125. This building was eligible for listing on the NRHP as a contributing element of the Army Air Forces Historic District. Its demolition was evaluated in an EIS completed in 1997 (USAF, 1997). An MOA (USAF, 1999) addresses mitigation measures for the demolition of 10 historic buildings, including Building 20125. Under Section III, Paragraph C of the MOA, it is stated that WPAFB shall submit to the SHPO the site redevelopment plans of the sites cleared by the demolition of the 10 historic buildings listed in the MOA. Of these 10 buildings, only the site of former Building 20125 is part of the proposed project area. The relevant portions of the EA would be sent to the SHPO to address the site development issue for the Building 20125 site. The SHPO would have thirty days to review and comment on the plans.

Because the proposed project site has been previously disturbed, no impacts to cultural resources are expected to occur under the proposed action. No known archaeological, historic, or Native American ceremonial/traditional sites are expected within the site boundaries. In the event that cultural items are encountered during project activities, work would cease immediately and the Base Historic Preservation Officer (BHPO) would be contacted to assess the items.

As described in Section 3.5, the WPAFB Mound (Site 33 GR 31), which is listed on the NRHP, is located southeast and adjacent to the proposed project site. No impacts to this resource would occur because the mound would be identified in the field and vehicular traffic and other activities would be minimized in this area.

4.5.2 No Action

There would be no impacts to cultural resources under the No Action alternative.

4.6 Natural Resources

4.6.1 Proposed Action

Vegetation throughout the site would be disturbed and removed during site preparation. However, impacts would be minor because the vegetation in this area is common throughout the base. The area would be landscaped with similar vegetation species (e.g., grasses) after construction activities were completed.

There would be no impacts to threatened and endangered species.

4.6.2 No Action

Natural resources would not be impacted under the No Action Alternative.

4.7 Wetlands

4.7.1 Proposed Action

There are no wetlands in the vicinity of the proposed location for the ITC. Therefore, wetlands would not be impacted.

4.7.2 No Action

Wetlands would not be impacted under the No Action alternative.

4.8 Noise

4.8.1 Proposed Action

The proposed construction site is located in the <65 dB current mission noise zone. Should the mission increase in the future, the noise level may increase to 70 to 75 db. There would be a minor, negative short-term impact on ambient noise levels at the project site over the course of project from the operation of heavy

machinery and equipment. The nearby facilities would experience muffled construction noise during the workday.

There would be potential minimal, long-term impacts to noise due to the increase in the number of personnel working in the area (e.g., increase in traffic noise).

4.8.2 No Action

There would be no impacts under the No Action alternative.

4.9 Health and Safety

4.9.1 Proposed Action

Because construction workers for the proposed ITC would be responsible for complying with standard operating procedures and applicable health and safety regulations (Table 1.4-1), no impacts to health and safety would be expected. In addition, "digging clearances" would be obtained from Base Civil Engineering and Base Utilities prior to excavating soil and installing utility lines.

Impacts to health and safety of nearby personnel would be minimized by clearly identifying the construction zone and prohibiting access to unauthorized individuals. Use of cranes and other high-profile equipment would require a "spotter" when operating near any overhead hazards. To minimize vehicle accidents, construction personnel would direct heavy vehicles entering and exiting the site.

4.9.2 No Action

No impacts to health and safety would occur under the No Action alternative.

4.10 Installation Restoration Program (IRP)

4.10.1 Proposed Action

The nearest IRP site to the proposed location of the ITC is 600 ft south of the facility; therefore, no impacts would be expected under the proposed action.

4.10.2 No Action

The No Action alternative would have no impact on any IRP sites.

4.11 Land Use

4.11.1 Proposed Action

As stated in Section 3.11, current land use of the proposed construction site is classified as Community-Service. Once the center is completed, land use for the location of the ITC would be classified as Research and Development.

4.11.2 No Action

The No Action alternative would have no impact on land use.

4.12 Socioeconomics

4.12.1 Proposed Action

Nominal, temporary socioeconomic impacts could occur during construction activities. Contractors and local businesses would benefit from employment and income through contracts associated with the proposed task.

Minor long-term beneficial impacts would occur from the reduction in costs associated with redundancy of information technology development and unnecessary operating costs.

4.12.2 No Action

Minor negative impacts from costs associated with redundancy of information technology development and unnecessary operating costs.

4.13 Transportation/Traffic

4.13.1 Proposed Action

There would be a short-term impact to traffic circulation due to project-related vehicles using primary and secondary arterial roadways (M Street, Fifth Street, and Hobson Way) to the proposed construction site. An increase in traffic circulation along M Street, Fifth Street, and Hobson Way would be expected as each phase of the project is completed. The proposed occupancy of the completed ITC is 1,800 people. Therefore, 1,800 vehicles could be anticipated during periods of full occupancy. According to the *100% Design Submittal* (KZF, 2002), a recent traffic analysis of the area has not been completed. However, 88 ABW Infrastructure group indicated that the existing roadways and access to the site were more than adequate to accommodate the full 1,800 person population that is anticipated (KZF, 2002).

4.13.2 No Action

The No Action alternative would have no effect on transportation/traffic.

4.14 Utilities

4.14.1 Proposed Action

Short-term impacts would be minimized by following the procedures specified for "digging clearances." Underground utilities (e.g., electric) in areas to be excavated would be marked by each division of base utilities. Proper excavation techniques would be used to ensure that underground utilities lines are not cut. Although the base has maps that describe the location of the utilities, there would be a potential for unmarked utilities. In the event a utility line is cut, on-site personnel would need to implement emergency procedures.

Procedures used to protect the utilities would be similar to those used to protect health and safety. When working with active electrical lines, a lock out/tag out procedure would be used. Use of cranes and other high-profile equipment would require a "spotter" when operating near any overhead lines. Construction sites would have utility line trenches marked and warning signs would be used during construction activities.

4.14.2 No Action

The No Action alternative would have no effect on utilities.

4.15 Environmental Justice

4.15.1 Proposed Action

There is little potential for the proposed action to have a disproportionately high adverse human health or environmental effect on low-income and minority populations that are located outside the boundaries of WPAFB. There would be no substantial economic ramifications resulting from the proposed action. The absence of nearby populations (including low-income and minority populations), the limited scope of the proposed action, and minimal effects do not present conditions for an Environmental Justice issue.

4.15.2 No Action

There would be no Environmental Justice issues with the No Action alternative.

4.16 Cumulative Impacts

Cumulative effects are those which may result from the incremental impact of the federal action (construction

of the ITC) when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such actions (See 40 CFR § 1508.7).

According to the "Capital Investment" document for FY06 – 09, there is only one construction project planned in Area B during the time of the proposed ITC project (WPAFB, 2004b). Steam lines and tunnels will be replaced in FY08 during the same timeframe that Phase II of the ITC is scheduled. However, no cumulative impacts would be expected.

4.17 Unavoidable Adverse Effects

If the proposed action were implemented, there would be a commitment of soil that is excavated as part of the site preparation/construction work. Impacts to vegetation would be minor because the species types are common to the base (i.e., ordinary vegetation) and the areas excavated would be re-seeded/landscaped. Minor impacts from noise would slightly affect passers-by and nearby workers. The increase in noise would be primarily due to construction/excavation equipment. Construction noise would only exist during working hours and would end at the completion of the operation. A nominal increase in noise may be noticed once the center is completed due to increased traffic. Temporary, minor increases in traffic would occur during the proposed action due to construction equipment. Approximately 1,800 personnel are anticipated to occupy the facility once it is operational, which would increase traffic in this area.

4.18 Relationship of Short-Term Uses and Long-Term Productivity

Currently, WPAFB lacks a single center for information technology development, integration, and transfer. Without the consolidation of information technology functions, Air Force's capability to develop, incorporate and deploy technology faster, cheaper and smarter is reduced. The ITC will provide state-of-the-art computing, and a collaborative modeling and simulation environment necessary to maintain and improve information technology functions, increase effectiveness, and reduce redundancy in information technology development and unnecessary operating costs.

4.19 Irreversible and Irretrievable Commitments of Resources

CEQ regulations in 40 CFR 1502.16 require that an agency identify any irreversible or irretrievable commitments of resources that would be involved in the proposed action, should it be implemented. Capital, energy, materials, and labor would be required for the action. These resources are not retrievable.

5.0 List of Preparers

The following individuals assisted in the preparation of or provided background information for this EA:

Name/Expertise	Role	Affiliation
Ajay Bahri / Air Quality	Report Preparation	Shaw Environmental, Inc.
Teresa Carleton / NEPA Procedures, Biology	Report Preparation	Shaw Environmental, Inc.
Suzette Cortina / Biology	Background Information, Maps	Shaw Environmental, Inc.
Cynthia Hassan / NEPA Procedures	Project Manager Report Preparation	Shaw Environmental, Inc.
Gregory Plamondon / Geology	Report Preparation	Shaw Environmental, Inc.
William Scoville / Engineering	Senior Review	Shaw Environmental, Inc.

6.0 List of Persons Contacted

Several persons were contacted or consulted during the preparation of the EA. The persons contacted are listed below:

Name	Role	Affiliation
Jan Ferguson	Base Historic Preservation Officer	88 ABW/EMO
Butch Grieszmer	Natural Resources	Ohio Department of Natural Resources; Division of Natural Areas & Reserves; Columbus, OH
Douglas Hulings	Traffic/Transportation	88 ABW/CECP
Mary Knapp	Threatened and Endangered Species	U.S. Fish and Wildlife Services
Gary Koenig	Program Manager	88 ABW/CECW
Ken Lammers	Threatened and Endangered Species	U.S. Fish and Wildlife Services
Tom Perdue	EIAP Program Manager	88 ABW/EMO
Alfonso Sanchez	Project Data	88 ABW/CECX

7.0 References

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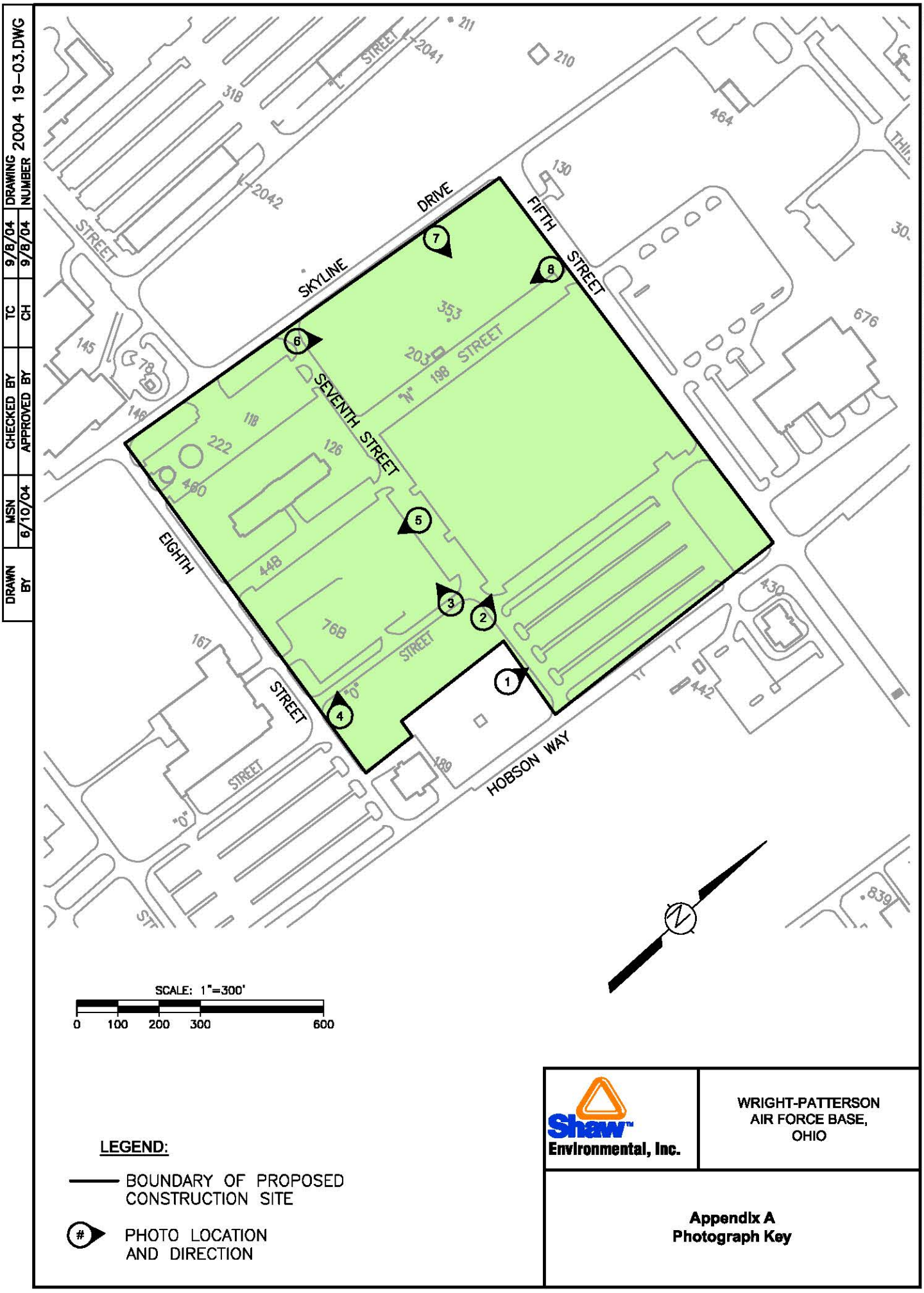
Wright-Patterson Air Force Base (WPAFB), 2004a, Traffic counts, personal communication between Douglas Hulings (WPAFB) and Cynthia Hassan (Shaw Environmental, Inc.), 10 June.

Wright-Patterson Air Force Base (WPAFB), 2004b, Personal communication between Gary Koenig (WPAFB) and Cynthia Hassan (Shaw Environmental, Inc.), 3 June.

Appendix A
Site Photographs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6
7
8
N
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LEGEND:
BOUNDARY OF PROPOSED CONSTRUCTION SITE
PHOTO LOCATION AND DIRECTION
Shaw Environmental, Inc.
WRIGHT-PATTERSON AIR FORCE BASE, OHIO
Appendix A
Photograph Key

Photo 1. View looking east of parking lots of former Building 20125.

Photo 2. View looking southwest of the site former Building 20125, the proposed location of the Information Technology Center.

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Photographs of the Proposed Location of the Information Technology Center (ITC)

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JIS, III	TC	6/4/04	S-108399.3-6/04-w
6/4/04	CH	6/4/04	

Photo 3. View of site at O and 7th Streets, looking west.

Photo 4. View of Building 20126 at O and 8th Streets, looking northwest.

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Photographs of the Proposed Location of the Information Technology Center (ITC)

DRAWING BY	CHECKED BY	APPROVED BY	DRAWING NO.
JIS, III	TC	CH	S-108399.3-6/04-w
6/4/04	6/4/04	6/4/04	

Photo 5. View of site at 7th Street, looking south.

Photo 6. View of site at 7th Street and Skyline Drive, looking northeast.

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Photographs of the Proposed Location of the Information Technology Center (ITC)

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JIS, III	TC	6/4/04	S-108399.3-6/04-w
6/4/04	CH	6/4/04	

Photo 7. View of site at Skyline Drive, looking east.

Photo 8. View of site at 5th Street, looking south.

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Photographs of the Proposed Location of the Information Technology Center (ITC)

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6/4/04	CH	6/4/04	
	APPROVED BY		

Appendix B
Correspondence with the
Ohio Department of Natural Resources

Shaw Environmental, Inc.

5050 Section Avenue
Cincinnati, OH 45212-2025
513.782.4700
Fax: 513.782.4807

Shaw® Shaw Environmental, Inc.

June 24, 2004

Heritage Data Services
Division of Natural Areas and Preserves
Ohio Department of Natural Resources
Fountain Square, Building F
Columbus, Ohio 43224

Request for Data for Proposed Project at Fifth, M, Eighth, and P Streets, Area B
Wright-Patterson Air Force Base, Ohio

Dear Mr. Grieszmer:

The purpose of this letter is to request information from the Natural Heritage Program for State and Federally-listed threatened or endangered plants and animals in the vicinity of Fifth, M, Eighth, and P Streets at Wright-Patterson Air Force Base (WPAFB). Under contract to WPAFB, we are currently preparing an environmental assessment (EA) to address potential impacts associated with the construction of a new Information Technology Center (ITC). The facility is intended to create a center of excellence for information technology. The ITC will provide state-of-the-art computing, and a collaborative modeling and simulation environment. The intent of the EA is to satisfy requirements under the National Environmental Policy Act (NEPA) of 1969.

The geographic location of the proposed construction site is Greene County, R.7, T.2 and is depicted in Figures 1 and 2. The proposed location of the ITC is at the site of former Buildings 20125 and 20127, which have been demolished, and Building 20126, which is scheduled for demolition. This site is bordered by Fifth, M (also known as Skyline Drive), Eighth, and P Streets. There are no natural resources (i.e., woodland, prairie, wetlands, ponds, streams) in the vicinity of the proposed construction site.

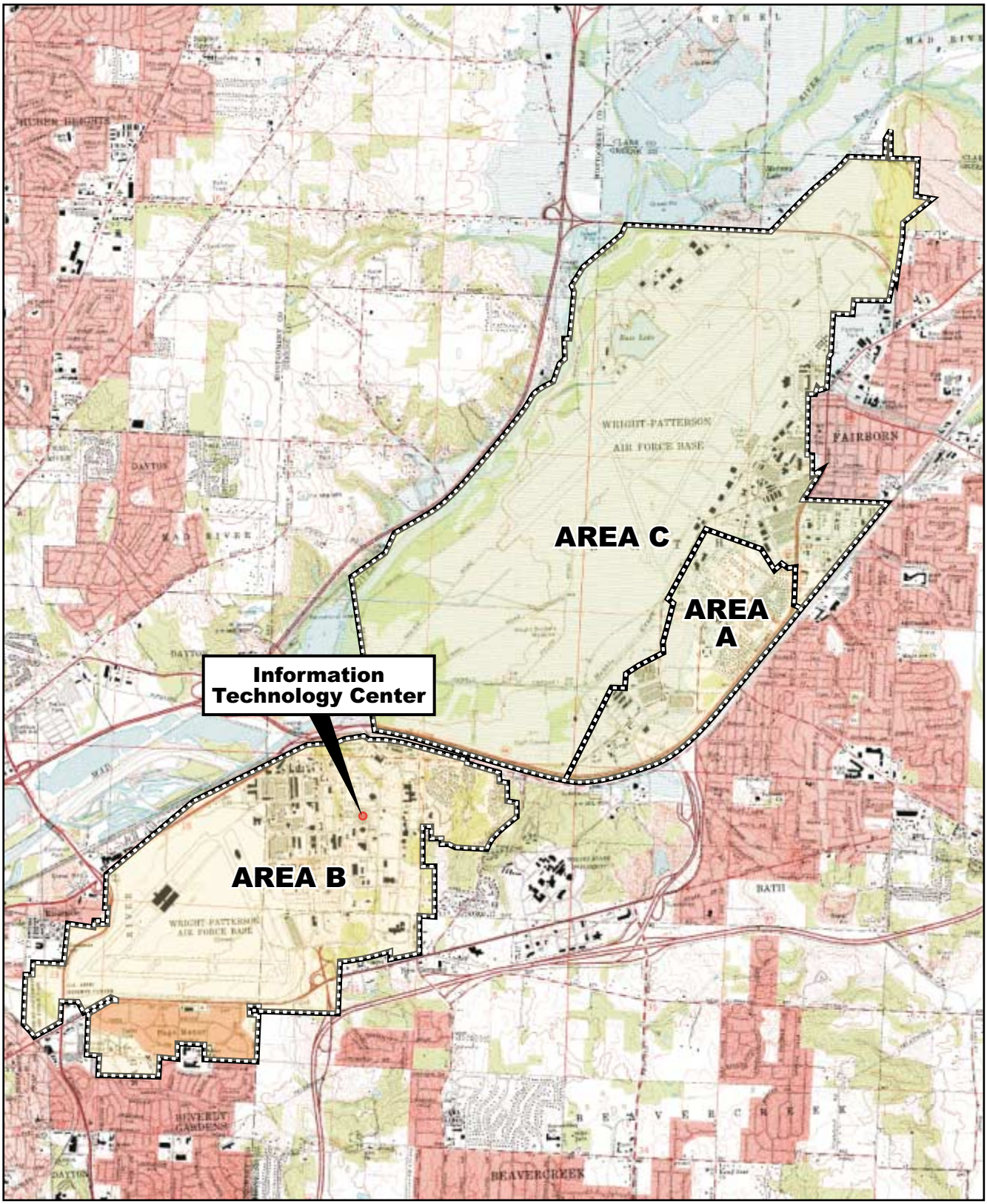
To meet the anticipated space requirement of 500,000 gross square feet (gsf), the proposed facility would be a five-phase project with construction of 100,000 gsf to 130,000 gsf for each phase. Each phase would consist of the construction of a building that would include a basement and a maximum of three stories above grade. Parking lot construction would be phased to coordinate with buildings and maintain appropriate construction staging areas. The buildings would consist of a reinforced concrete foundation and floor slab, structural frame, and roof systems. The facility would include computer rooms, secure spaces, administrative and special purpose spaces, and learning and engineering spaces. Activities associated with construction would include site preparation, construction of the buildings and parking lots, and landscaping.

A form for a Data Request has been attached. We would appreciate any information from your database that applies to our project area. Please expedite our request, if possible, and contact me at 513/782-4967 if you have any questions or require further information. Thank you for your attention to this request.

Sincerely,
SHAW ENVIRONMENTAL, INC.

Cynthia A. Hassan

Cynthia A. Hassan
Project Manager
cc: T. Perdue (88 ABW/EMO, WPAFB)



Shaw™ Shaw Environmental, Inc.

Figure 1
Location of the Proposed
Information Technology Center
Wright-Patterson Air Force Base
Dayton, Ohio

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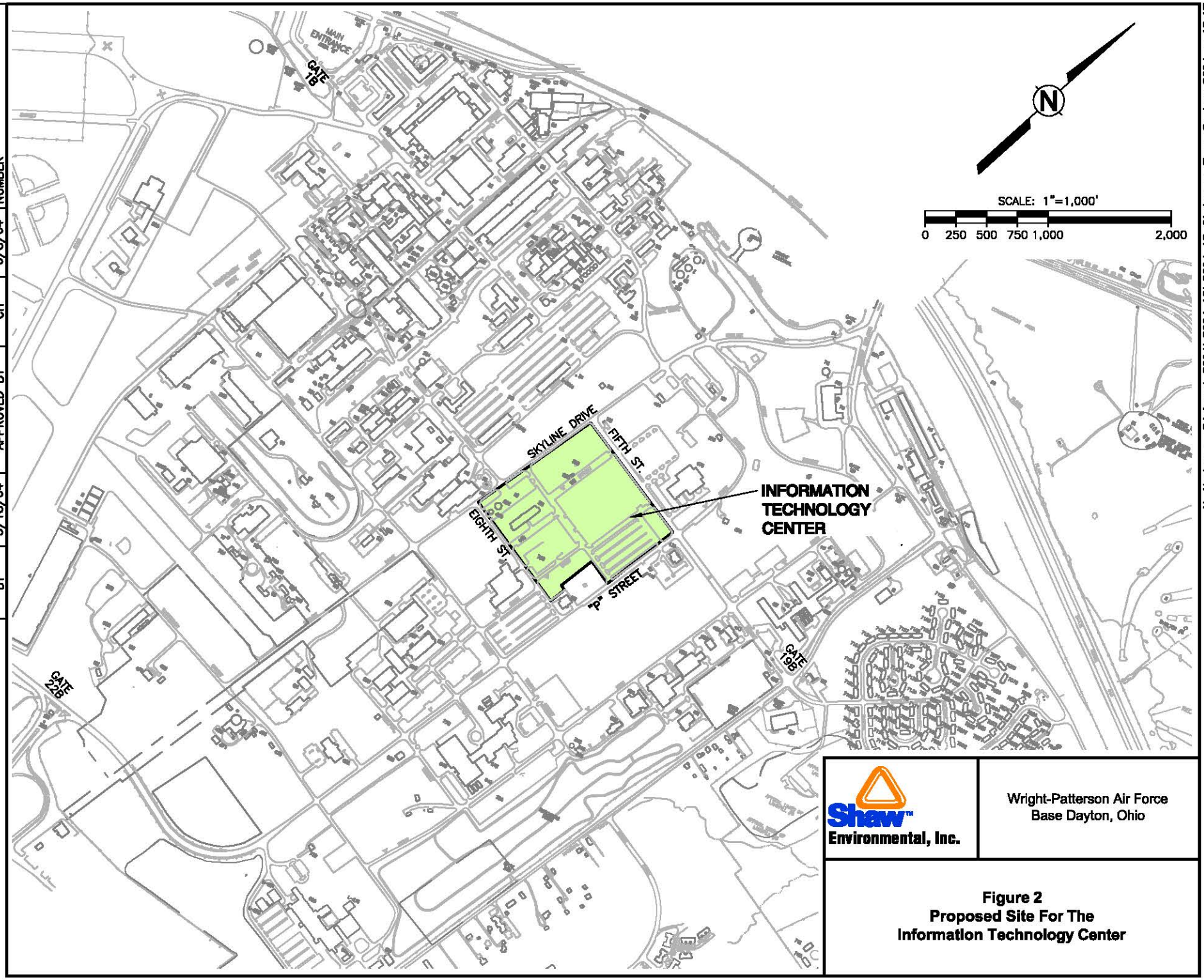

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Shaw™ Environmental, Inc.

Wright-Patterson Air Force Base Dayton, Ohio

Figure 2
Proposed Site For The Information Technology Center

DATA REQUEST
OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF NATURAL AREAS AND PRESERVES
HERITAGE DATA SERVICES
1889 FOUNTAIN SQUARE COURT, BUILDING F-1
COLUMBUS, OHIO 43224
PHONE: 614-265-6453; FAX: 614-267-3096

INSTRUCTIONS:
Print this form from your browser. Then fill out both pages, sign it and return it to the address or fax number listed above along with: **(1)** a letter formally requesting data and describing your project, and **(2)** a map detailing the boundaries of your study area. A photocopy from the pertinent portion of a USGS 7.5 minute topographic map is preferred but other maps are acceptable. Our turnaround time is two weeks, although we can often respond more quickly.

FEES:
Fees are determined by the amount of time it takes to complete your project. The charge is $25.00 per 1/2 hour with a 1/2 hour minimum. We can perform a data search manually or by computer. The Heritage Data Services staff will determine the most cost-efficient method of doing your search. A cost estimate can be provided upon request. Unless otherwise specified, an invoice will accompany the data services response.

****

This request is being submitted by: __fax _X_mail __both
Date: 6/24/04

Your Agency/Organization: Shaw Environmental and Infrastructure, Inc.

Your Name/Title: Cynthia A. Hassan, Project Manager

Address: 5050 Section Avenue

City/State/Zip: Cincinnati, OH 45212-2025

Phone/Fax: 513/782-4967 Fax: 513/782-4807

Project Name/Number: Environmental Assessment (EA) for Construction of a New Information Technology Center, Wright-Patterson Air Force Base, Ohio

Project is located on the following USGS 7.5 minute topographic map(s):

Fairborn Quad, R.7, T.2

If there is a program or contracting agency requiring this information, please give the name and phone number of a contact person:

Thomas Perdue, 88 ABW/EMO, WPAFB 937/257-5532

The Natural Heritage Data Base contains records for the categories of species and features listed below. Check the appropriate item/s to indicate your selection.

PLANTS:	___Federal Status Only	ANIMALS:	___Federal Status Only
	___ State Legal Status Only		___ State Legal Status Only
	___ Rare (non-legal status)		___ Rare (non-legal status)
	_X_ All of the above		_ X _ All of the above

PLANT COMMUNITIES: _X_ All

___ Wetlands Only

___ Other_____

OTHER FEATURES: ___ Geologic Features

___ Breeding/Non-breeding Animal Concentrations

___ Champion Trees

___ State Nature Preserves and Natural Areas

___ State Wild, Scenic and Recreational Rivers

___ State Parks, Forests, Wildlife Areas

_X_ All of the above

___ Other_____

Besides name, location and status, specify any additional information you need:

None.

The area you want to search: ___ study area as outlined on the map

_X_ study area plus ½ mile radius

___ study area plus 1 mile radius

___ other_____

How will the information be used:

The name, status, and location of each species will be published in an EA that is being performed to satisfy requirements under the National Environmental Policy Act (NEPA.)

The information supplied above is complete and accurate. Any material supplied by the Natural Heritage Data Base will not be published without prior written permission and without crediting the Division of Natural Areas and Preserves as the source of the material.

Your Signature: Cynthia A. Hassen

Ohio Department of Natural Resources

BOB TAFT, GOVERNOR — SAMUEL W. SPECK, DIRECTOR

Division of Natural Areas & Preserves
Nancy Strayer, Acting Chief
1889 Fountain Square, Bldg. F-1
Columbus, OH 43224-1388
Phone: (614) 265-6453 Fax: (614) 267-3096

June 28, 2004

Cynthia A. Hassan
Shaw Environmental and Infrastructure, Inc.
5050 Section Ave.
Cincinnati, OH 45212-2025

Dear Ms. Hassan:

After reviewing our Natural Heritage maps and files, I find the Division of Natural Areas and Preserves has no records of rare or endangered species within one half mile of the Shaw Environmental and Infrastructure, Inc. project for the construction of a new Information Technology Center at Wright-Patterson Air Force Base. The site is located in Sec. 12, Bath Twp., Greene Co., Fairborn Quadrangle.

There are no existing or proposed state nature preserves at the project site. We are also unaware of any unique ecological sites, geologic features, breeding or non-breeding animal concentrations, champion trees, state parks, state forests, scenic rivers, or wildlife areas within the project area.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although we inventory all types of plant communities, we only maintain records on the highest quality areas. Also we do not have data for all Ohio wetlands. The Division of Wildlife has a statewide wetland inventory that can give you additional data. Their phone number is (614) 265-6300. For National wetlands Inventory maps, please contact Madge Fitak in the Division of Geological Survey at (614) 265-6576. Aerial photos may be obtained from ODOT at (614) 275-1369. USGS maps can be requested directly from the U.S. Geological Survey at 1-888-275-8747.

Please contact me at (614) 265-6409 if I can be of further assistance.

Sincerely,

Butch Grieszmer, Data Analyst
Resource Services Group

Appendix C
Correspondence with the
U.S. Fish & Wildlife Service

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 88TH AIR BASE WING (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE OHIO

16 JUN 2004

88 ABW/EMO
5490 Pearson Road, Building 89
Wright-Patterson Air Force Base, OH 45433-5332

Mr. Ken Lammers, Acting Director
U.S. Fish and Wildlife Service
Ecological Services
6950 Americana Parkway, Suite H
Reynoldsburg, Ohio 43068-4132

Dear Mr. Lammers:

The U.S. Air Force is seeking informal consultation with the U.S. Fish and Wildlife Service in compliance with Section 7 of the Endangered Species Act for the proposed construction of a new Information Technology Center (ITC). The facility is intended to create a center of excellence for information technology. The ITC will provide state-of-the-art computing, and a collaborative modeling and simulation environment. Wright-Patterson Air Force Base (WPAFB) has initiated an environmental assessment (EA) for this project in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969. The geographic location of the proposed construction site is Greene County, R.7, T.2 (see attached figures).

To meet the anticipated space requirement of 500,000 gross square feet (gsf), the proposed facility would be a five-phase project with construction of 100,000 gsf to 130,000 gsf for each phase. Each phase would consist of the construction of a building that would include a basement and a maximum of three stories above grade. Parking lot construction would be phased to coordinate with buildings and maintain appropriate construction staging areas. The buildings would consist of a reinforced concrete foundation and floor slab, structural frame, and roof systems. The facility would include computer rooms, secure spaces, administrative and special purpose spaces, and learning and engineering spaces. Activities associated with construction would include site preparation, construction of the buildings and parking lots, and landscaping.

The proposed location of the ITC is at the site of former Buildings 20125 and 20127, which have been demolished, and Building 20126, which is scheduled for demolition. This site is bordered by Fifth, M, Eighth, and P Streets. There are no natural resources (i.e., woodland, prairie, wetlands, ponds, streams) in the vicinity of the proposed construction site.

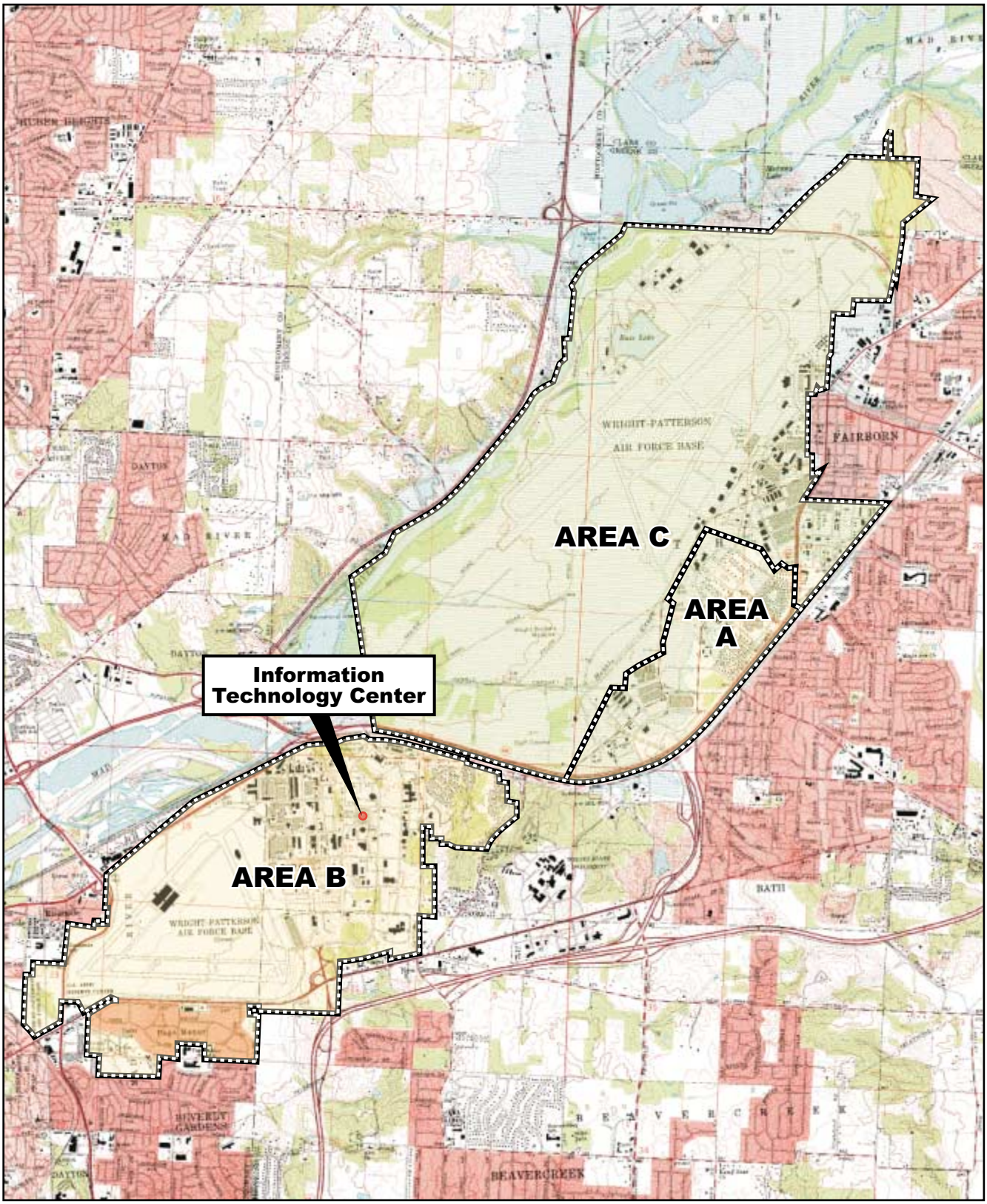
I am requesting comment from your agency regarding the presence or absence of federal- and state-listed species that may be located within 0.5 miles of the proposed project location. Threatened and endangered species known to exist within the vicinity of the base include the Indiana bat (*Myotis sodalis*), bald eagle (*Haliaeetus leucocephalus*), eastern massasauga rattlesnake (*Sistrurus c. catenatus*), clubshell (*Pleurobema clava,* a mussel), and blazing star stem borer (*Papaipema beeriana*, a moth).

In addition, please comment on the presence or absence of areas of ecological concern including wetlands, national wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries that may be located within the area likely to be disturbed by the project. The attached maps (see Figures 1 and 2) depict the location of the proposed project area. We have also contacted the ODNR's Division of Natural Areas and Preserves for a search of their Natural Heritage Database.

Please return your comments to me at the address located on the letterhead. If you have any questions, please call me at 937-257-5532. Thank you in advance for your time.

Sincerely,

Thomas Perdue
EIAP Program Manager
Operations Branch
Office of Environmental Management



Shaw™ Shaw Environmental, Inc.

Figure 1
Location of the Proposed
Information Technology Center
Wright-Patterson Air Force Base
Dayton, Ohio

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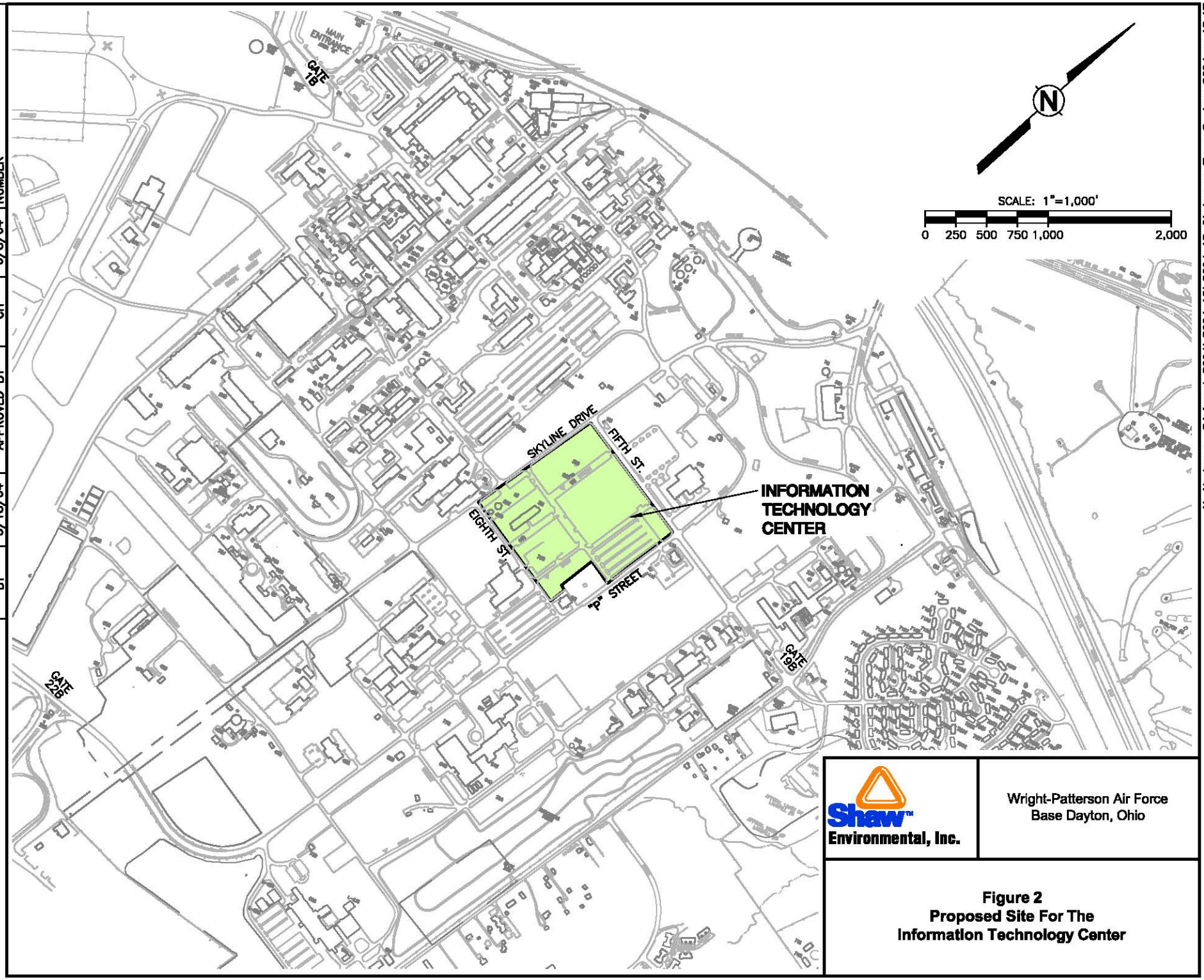

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Shaw™ Environmental, Inc.

Wright-Patterson Air Force Base Dayton, Ohio

Figure 2
Proposed Site For The Information Technology Center

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
6950 Americana Parkway, Suite H
Reynoldsburg, Ohio 43068-4127
(614) 469-6923
Fax: (614) 469-6919

July 19, 2004

Thomas Perdue
Department of the Air Force
88 ABW/EMO
5490 Pearson Road, Building 89
Wright-Patterson Air Force Base, OH 45433-5332

Re: Information Technology Center

Dear Mr. Perdue:

This is in response to your June 16, 2004 letter requesting informal consultation in compliance with Section 7 of the Endangered Species Act, for the proposed construction of a new Information Technology Center. The proposed project consists of construction of five buildings with a total usable interior of approximately 500,000 square feet, and construction of parking lots to serve the Center. The proposed area for the project is located at the site of former Buildings 20125 and 20127, which have been demolished, and Building 20126, which is scheduled for demolition. There are no woodlands, prairies, wetlands, ponds, or streams in the vicinity of the proposed site. The site is located on the Wright-Patterson Air Force Base, Greene County, Ohio.

There are no Federal wilderness areas, wildlife refuges, or designated Critical Habitat within the vicinity of the proposed sites.

ENDANGERED SPECIES COMMENTS: The proposed project lies within the range of the **Indiana bat** (*Myotis sodalis*), a Federally-listed endangered species. Since first listed as endangered in 1967, their population has declined by nearly 60%. Several factors have contributed to the decline of the Indiana bat, including the loss and degradation of suitable hibernacula, human disturbance during hibernation, pesticides, and the loss and degradation of forested habitat, particularly stands of large, mature trees. Fragmentation of forest habitat may also contribute to declines. Summer habitat requirements for the species are not well defined but the following are considered important:

1. Dead or live trees and snags with peeling or exfoliating bark, split tree trunk and/or branches, or cavities, which may be used as maternity roost areas.

2. Live trees (such as shagbark hickory and oaks) which have exfoliating bark.

3. Stream corridors, riparian areas, and upland woodlots which provide forage sites.

A maternity colony of Indiana bats was recently found on the campus of Wright State University, approximately one mile from the proposed project site. Should the proposed site contain trees or associated habitats exhibiting any of the characteristics listed above, we recommend that the habitat and surrounding trees be saved wherever possible. If the trees must be cut, further coordination with this office is needed. Additionally, suitable bat roost trees should not be cut between April 15 and September 15.

If desirable trees are present and must be cut, mist net or other surveys may be warranted to determine if bats are present. Any survey should be designed and conducted in coordination with the Endangered Species Coordinator for this office. The survey should be conducted in June or July, since the bats would only be expected in the project area from approximately April 15 to September 15.

The proposed project lies within the range of the **clubshell mussel** (*Pleurobema clava*), which has historically inhabited the Little Miami River. Best-management practices should be used to minimize erosion from the construction site, which would reduce potential impacts to this species.

The project lies within the range of the **eastern massasauga rattlesnake** (*Sistrurus catenatus catenatus*). Due to the project type and location, the project, as proposed, will have no effect on this species. Relative to this species, this precludes the need for further action on this project as required by the 1973 Endangered Species Act, as amended.

Should additional information on listed or proposed species or their critical habitat become available or if new information reveals effects of the action that were not previously considered, this determination may be reconsidered. If project plans change or if portions of the proposed project were not evaluated, it is our recommendation that you contact our office for further review.

This technical assistance letter is submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C.661 et seq.), the Endangered Species Act of 1973, as amended, and is consistent with the intent of the National Environmental Policy Act of 1969, and the U.S. Fish and Wildlife Service's Mitigation Policy.

If you have questions, or if we may be of further assistance in this matter, please contact Jeromy Applegate at extension 21 in this office.

Sincerely,

Mary Knapp

Mary Knapp, Ph.D.
Supervisor

cc: ODNR, DOW, SCEA Unit, Columbus, OH

Appendix D
Emissions Estimates for the Construction of an Information Technology Center

Construction of Information Technology Center
Emissions Estimate

Construction Emissions

Area Description	Area		Project Duration	Emission Factor	Control Efficiency	Estimated Emissions
	A		T	EM_{FAC}	CE	E_{TON}
	A = L * W		†2	†3	†4	$E_{TON} = A * T * EM_{FAC}$
	(ft.²)†1	(acre)	(months)	(ton/acre/month)	(%)	(ton)
Overall Construction Area	237,367.2	5.4	3	1.2	80%	3.92

Normal Base-wide Emissions	*Variable Description*
E_{NORM}	*Symbol*
†5	*Footnote*
(ton/yr.)	*Units*
13.64	*Values*

Conclusions:

Based upon previous estimates of basewide particulate emissions as referenced and the conservative emissions estimates,the proposed project is expected to have only short-term negligible impacts on air quality.

LEGEND

†1 Note: Based on the total construction area of 1,186,836 square feet, spread over 5 phases, one per year.

†2 Note: Conservative estimate for excavation work = 3 months.

†3 Note: Emission factor Section 13.2.3 "Heavy Construction Operations" (dated 1/95), of AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, U.S. EPA, Research Triangle Park, NC, 1998.

†4 Note: Table 2.1.1-3 - "Summary of Techniques, Efficiencies, and Costs for Controlling Fugitive Dust from Paved and Unpaved Surfaces," Fugitive Dust Control Technology, Orlemann (1993).
Control efficiency for watering of paved surfaces.

†5 Note: Particulate emissions from WPAFB Fee Emission Report for 2003.